City Hall ◆ 333 West Ellsworth Street ◆ Midland, Michigan 48640 ◆ 989.837.3300 * 989.837.2717 Fax ◆ www.cityofmidlandmi.gov

REGULAR MEETING OF THE MIDLAND CITY COUNCIL
City Hall, 333 W. Ellsworth Street

March 27, 2017 7:00 PM

AGENDA

CALL TO ORDER - Maureen Donker, Mayor

PLEDGE OF ALLEGIANCE TO THE FLAG

ROLL CALL - Thomas W. Adams
Steve Arnosky
Diane Brown Wilhelm
Maureen Donker
Marty A. Wazbinski

CONSIDERATION OF ADOPTING CONSENT AGENDA ITEMS:

All resolutions marked with an asterisk are considered to be routine and will be enacted by one motion. There will be no separate consideration of these items unless a Council member or citizen so requests during the discussion stage of the "Motion to adopt the Consent Agenda as indicated." If there is even a single request the item will be removed from the consent agenda without further motion and considered in its listed sequence in regular fashion.

APPROVAL OF MINUTES:

1. * Approve minutes of the March 8 special and March 13 regular City Council meetings. TISDALE

PROCLAMATIONS, AWARDS, RECOGNITIONS, PRESENTATIONS:

2. Proclamation recognizing Chemical Bank in celebration of its 100th anniversary. LYNCH

PUBLIC COMMENTS, IF ANY, BEFORE CITY COUNCIL. This is an opportunity for people to address the City Council on issues that are relevant to Council business but are not on the agenda.

RESOLUTIONS:

3. Receiving and filing the Eastman Avenue Corridor Study update. MCMANUS

4. Receiving and filing the US-10 Business Route Corridor Study. MCMANUS

5. Authorizing the City Clerk to submit the required grant application on behalf of the City of Midland for new election equipment. TISDALE

6. * Accepting four new street segments into the City of Midland Local Street System as required by the Michigan Department of Transportation for Act 51 funding. MCMANUS

7. * Approving the request to conduct a March for Science - Midland on Saturday, April 22. MCMANUS

8. * Considering reappointments of incumbents to boards and commissions and establishing a timeline for filling remaining vacancies. TISDALE

Considering purchases and contracts:

9. * Quality Aviation Services Contract Update. MCMANUS

10. * Design Services for Upper Emerson Riverfront Renovation. MURPHY

11. * Renovations to the exterior planters at the Grace A. Dow Memorial Library. BARNARD

12. * 2017 Pavement Marking Program; Contract No. 18. MCMANUS

13. * Sewer Linings, Main Street and Meadowbrook Drive - Wastewater. SOVA

14. * E10 Ethanol Blend Unleaded Fuel purchase from March 9 (4/5 vote required). MURPHY

Setting a public hearing:

NEW BUSINESS:

TO CONTACT THE CITY WITH QUESTIONS OR FOR ADDITIONAL INFORMATION:

Citizen Comment Line:	837-3400
City of Midland website address:	www.cityofmidlandmi.gov
City of Midland email address:	cityhall@midland-mi.org
Government Information Center:	located near the reference desk at the Grace A. Dow Memorial Library

Backup material for agenda item:

1. * Approve minutes of the March 8 special and March 13 regular City Council meetings. TISDALE

UNAPPROVED

March 8, 2017

A special meeting of the City Council was held Wednesday, March 8, 2017, at 6:30 p.m. at the Currie Golf Course Clubhouse. Mayor Donker presided.

Councilmen present: Thomas Adams, Steve Arnosky, Maureen Donker, Marty Wazbinski
Councilmen absent: Diane Brown Wilhelm

CITIZENS ACADEMY

City Council held a discussion with the participants of the 2017 Citizens Academy.

Being no further business the meeting adjourned at 8:30 p.m.

Selina Tisdale, City Clerk

UNAPPROVED

March 13, 2017

A regular meeting of the City Council was held on Monday, March 13, 2017, at 7:00 p.m. in the Council Chambers of City Hall. Mayor Donker presided. The Pledge of Allegiance to the Flag was recited in unison.

Councilmen present: Thomas Adams, Steve Arnosky, Diane Brown Wilhelm, Maureen Donker, Marty Wazbinski
Councilmen absent: None

MINUTES

Approval of the minutes of the February 20, 2017 regular meeting was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski. (Motion ADOPTED.)

2016-17 GENERAL FUND BUDGET AMENDMENT – EMERSON PARK RIVERFRONT

Department of Public Services Director Karen Murphy presented information on the proposed 2016-17 General Fund budget to increase revenues by $375,000 and expenditures by $405,000 for renovations to the riverfront in upper Emerson Park. A public hearing opened at 7:08 p.m., recognizing no public comments, the hearing closed at 7:08 p.m. The following resolution was then offered by Councilman Arnosky and seconded by Councilman Brown Wilhelm:

WHEREAS, the City has been awarded a grant from the Michigan Natural Resources Trust Fund for $295,000 for renovations to the upper Emerson Park riverfront; and
WHEREAS, matching funds totaling $80,000 have been pledged by local funding partners that include the Friends of the Pere Marquette Rail Trail, the Midland Area Community Foundation and the Saginaw Bay Watershed Initiative Network for a total grant revenue amount of $375,000; and
WHEREAS, the FY 2016-17 Parks Capital Outlay budget contains $30,000 in City funds to be used toward the project but does not recognize the additional grant funding or associated project expenses; and
WHEREAS, in order to spend the grant funds for the purpose intended, it is necessary to amend the FY 2016-17 General Fund budget; and
WHEREAS, in accord with Sections 5.11, 11.4 and 11.6 of the Charter of the City of Midland, and after having given proper legal notice, and having conducted a public hearing on Monday, March 13, 2017, on the proposal to amend the FY 2016-17 General Fund Budget to recognize the unanticipated revenue, as well as increase expenditures to fund the costs associated with this project; now therefore
RESOLVED, that the FY 2016-17 General Fund Budget is hereby amended to increase revenues by $375,000 to recognize grant funds received and expenditures by $405,000 to proceed with renovations to the riverfront in upper Emerson Park. (Motion ADOPTED.)

CONDITIONAL USE PERMIT NO. 58

Assistant City Manager for Development Services Brad Kaye presented information on Conditional Use Permit No. 58 – a request from Habitat for Humanity for review and approval of a conditional land use for a single family dwelling in RB Multiple Family Residential zoning district located at 310 Sam Street. A public hearing opened at 7:17 p.m. Jennifer Chappel, Executive Director for Midland County Habitat for Humanity, spoke in favor of the project. The hearing closed a 7:18 p.m. The following resolution was then offered by Councilman Adams and seconded by Councilman Wazbinski:

WHEREAS, Midland County Habitat for Humanity submitted a request for a conditional land use permit for a single family dwelling in a RB Multiple Family Residential zoning district, located at 310 Sam Street; and

WHEREAS, the City Planning Commission has conducted a public hearing in accord with Section 28.02(A) of the Zoning Ordinance of the City of Midland on said conditional use; and

WHEREAS, the Planning Commission has submitted its recommendation of approval, contingent upon the following:

1. One (1) single family dwelling shall be permitted on the property.
2. One (1) driveway shall be permitted to Sam Street.
3. Approval is granted to the proposed single family dwelling only. Any additional uses of the property shall be reviewed and approved in accordance with the standards of the City of Midland Zoning Ordinance, including the requirements for site plan approval under Article 27.

in accord with Section 28.02(B) of the Zoning Ordinance of the City of Midland; now therefore

RESOLVED, that the City Council finds the request for the conditional use permit to be in accord with Section 28.03 of the Zoning Ordinance of the City of Midland, and hereby approves Conditional Use Permit No. 57, in accord with documents provided and submitted at the meeting of February 20, 2017. (Motion ADOPTED.)

ZONING PETITION NO. 609

Assistant City Manager for Development Services Brad Kaye presented information on Zoning Petition No. 609 – rezoning property located at 5706, 5712 and 5720 North Saginaw Road from Residential A-1 Single Family Residential zoning to Regional Commercial zoning. A public hearing opened at 7:28 p.m., recognizing no public comments, the hearing closed at 7:28 p.m. The following ordinance amendment was then offered by Councilman Arnosky and seconded by Councilman Wazbinski:

ORDINANCE NO. 1797

AN ORDINANCE TO AMEND ORDINANCE NO. 1585, BEING AN ORDINANCE TO REGULATE AND RESTRICT THE LOCATION OF TRADES AND INDUSTRIES AND THE LOCATION OF BUILDINGS DESIGNED FOR SPECIFIC USES, TO REGULATE AND LIMIT THE HEIGHT AND BULK OF BUILDINGS HEREAFTER ERECTED OR ALTERED, TO REGULATE AND DETERMINE THE AREA OF YARDS, COURTS, AND OTHER OPEN SPACES SURROUNDING BUILDINGS, TO REGULATE AND LIMIT THE DENSITY OF POPULATION, AND FOR SAID PURPOSES, TO DIVIDE THE CITY INTO DISTRICTS AND PRESCRIBE PENALTIES FOR THE VIOLATION OF ITS PROVISIONS BY AMENDING THE ZONING MAP TO PROVIDE A REGIONAL COMMERCIAL ZONING DISTRICT WHERE A RESIDENTIAL A-1 SINGLE FAMILY RESIDENTIAL ZONING DISTRICT PRESENTLY EXISTS.

The City of Midland Ordains:

Section 1. That the Zoning Map of Ordinance No. 1585, being the Zoning Ordinance of the City of Midland, is hereby amended as follows:

5706 NORTH SAGINAW ROAD
BEG ON N LN SAGINAW RD ROW 654.26 FT SE OF INT WITH S 1/8 LN TH SE 25 FT NE 230 FT SE 120 FT SW 230 FT SE 70 FT NE 569 FT TO S 1/8 LN W ON 1/8 LN TO A PT 623 FT E OF N LN OF ROW SW 101.11 FT SE 140 FT SW 240 FT TO POB SEC 1

5712 NORTH SAGINAW ROAD
BEG ON N LN OF SAGINAW RD 679.26 FT SE OF INT WITH S 1/8 LN R1E TH NE 230 FT SE 120 FT SW 230 FT NW 120 FT TO POB

5720 NORTH SAGINAW ROAD
BEG 514.26 FT TO SE OF INT OF SAGINAW RD & S 1/8 LN TH SE 140 B FT NE 240 FT NW 140 FT SW 240 FT TO POB SEC 1 T14N

Be, and the same is hereby changed to Regional Commercial zoning.
Section 2. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.
Section 3. This Ordinance shall take effect upon publication. (Ordinance ADOPTED.)

PUBLIC COMMENTS

No public comments were made.

2017 SIDEWALK IMPROVEMENT PROGRAM

City Engineer Brian McManus presented information on the 2017 Sidewalk Improvement Program. Linda Stachowiak, 6008 Whiffletree Lane, spoke in support of her sidewalk request on Shirewood Lane. The following resolution was then offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the City Council has had under consideration the construction of concrete sidewalks, to be financed in part by special assessment, located in certain streets in the City of Midland, said streets being:

Bayliss Street (west side)	from Haley Street to Arbury Place
Shirewood Lane (south side)	at 510 Shirewood Lane
E. Wackerly Street (north side)	at 405 E. Wackerly Street
W. Wackerly Street (north side)	at 2300, 2520 and 2720 W. Wackerly Street
Waldo Avenue (west side)	from James Savage Road to Yale Avenue
W. Wackerly Street (north side)	at 2200 and 2408 W. Wackerly Street

; now therefore
RESOLVED, that the City Manager is directed to prepare a report which shall include estimates of the expense thereof, an estimate of the life of the improvement, and a description of the district benefited to enable the Council to decide the cost, extent and necessity of the improvement proposed and what part or portion thereof should be paid by special assessments upon property especially benefited, and what part, if any, should be paid by the City at large, in conformance with the provisions of Chapter 20 of the Code of Ordinances of the City of Midland, Michigan. (Motion ADOPTED.)

ANNUAL REVIEW OF LIQUOR LICENSES REPORT

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, Section 15-250 of the City of Midland Code of Ordinances directs the City Manager to cause an annual review of each liquor licensee to be submitted to the City Council; and
WHEREAS, said annual review has been prepared and reports that all licensees have complied with the provisions of Article VII of Chapter 15 of the Code of Ordinances; now therefore
RESOLVED, that in accord with Section 15-250 of the City of Midland Code of Ordinances, the annual review of liquor licenses is hereby received and ordered placed on file in the Office of the City Clerk. (Motion ADOPTED.)

2017 DART TITLE VI PLAN

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the City of Midland Dial-A-Ride is an eligible recipient of federal financial assistance; and

WHEREAS, the City of Midland Dial-A-Ride is required to adhere to the Title VI regulation (49 CFR Part 21) and the Federal Transit Administration's Circular 4702.1B; and
WHEREAS, the City is fully committed to ensure that no person is excluded from participation in, or denied the benefits of its services on the basis of race, color or national origin as protected by Title VI of the Civil Rights Act of 1964, as amended; and
WHEREAS, the City of Midland Dial-A-Ride must submit a Title VI plan to the Federal Transit Administration every three years; and
WHEREAS, the Title VI plan must be approved by the eligible recipient's governing body; and
WHEREAS, the Title VI plan must contain the following elements:

- Notice of rights under Title VI
- How to file a complaint, copy of complaint form
- List of Title VI investigations, complaints or lawsuits
- Public Participation plan
- Limited English Proficient (LEP) plan
- Governing body resolution or minutes demonstrating approval of the program; now therefore

RESOLVED, that the City Council hereby approves the City of Midland Dial-A-Ride's 2017 Title VI Plan; and
RESOLVED FURTHER, that the City Manager, or his designee, is hereby authorized to develop, implement, monitor and execute all required documents necessary to comply with Title VI program requirements of 49 CFR Part 21 and Circular 4702.1B. (Motion ADOPTED.)

HIKE FOR HEARING 5K EVENT

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

RESOLVED, that the request from Hannah Twardy to conduct a Hike for Hearing 5k on Sunday, April 2, 2017, utilizing the public right-of-way, is hereby approved subject to the following conditions:

- The responsible party and contact number for the event date is Hannah Twardy, 616-824-6358.
- It is suggested the organizer have an alternative start/end point in the event there is any spring flooding that closes Emerson Park.
- If there are plans to use a park pavilion or put up a tent for the start/end point, organizer needs to call the Parks Office at 837-6930.
- The restrooms at Emerson Park will NOT be open for the season by April 2. If the organizer feels restrooms are needed, they will have to arrange to have a porta-jon brought in.
- Use of the Rail Trail is non-exclusive and **no markings of any type** (i.e., paint, spray paint, spray chalk, chalk, etc.) are permitted on the trail route surfaces.
- Participants must remain on the Rail Trail and obey all traffic laws and traffic control devices as well as the Rail Trail Etiquette/Rules attached.
- Trail must be cleaned up afterwards to remove any litter.
- Engineering will write Traffic Control Order for road closures.
- Department of Public Services will provide barricades per appropriate traffic control order issued by City Engineering.
- Event volunteers must monitor the intersections and move barricades for cars and passage of emergency vehicles as needed, when runners are not present. Two weeks

prior to the event, organizer shall meet with City Right-of-Way Inspector, Tom Hoblet (837-3355) for awareness training.

- The Police Department will monitor the event on regular patrol.

; and

RESOLVED FURTHER, that the Administrative Staff is hereby authorized to approve future requests for the event provided it is conducted in substantially the same manner. (Motion ADOPTED.)

TRIDGE RENOVATIONS

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, City Council accepted a very generous gift from the Rollin M. Gerstacker Foundation at their February 13 meeting to make renovations to the Tridge; and

WHEREAS, the City sought out an engineering firm with expertise in glue-laminated timber bridges to provide a list of key improvements that are needed at this time to extend the life of the Tridge; and

WHEREAS, City staff gathered cost estimates for the work from reputable companies in the timber bridge industry and estimate the total project to cost approximately $2,700,000; and

WHEREAS, funding for the project is comprised of $2,500,000 donated by the Rollin M. Gerstacker Foundation and $238,080 in spendable funds from the Tridge Endowed Maintenance fund held at the Midland Area Community Foundation (MACF); and

WHEREAS, funding for the project will be held and managed by MACF, with City staff managing the work flow component of the project including approval of all invoices prior to payment by MACF; and

WHEREAS, Section 2-20 of the Code of Ordinances allows City Council to waive competitive bids for projects which utilize funds donated to the City; now therefore

RESOLVED, that the City Council waives competitive bids for the Tridge renovation project and authorizes the City Attorney to approve and execute contracts with the three selected contractors for labor services - Precision Iceblast Corporation of Peshtigo, Wisconsin; JR Heineman & Sons, Inc. of Saginaw, Michigan; and Pyramid Control, Inc. of Midland, Michigan; and

RESOLVED FURTHER, that City Council authorizes staff to purchase materials for the project from Western Wood Structures Inc. of Tualatin, Oregon and Sentinel Structures, Inc. of Peshtigo, Wisconsin. (Motion ADOPTED.)

STREET TREE REPLACEMENT PROGRAM

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, sealed proposals were advertised and received in accordance with Article II of Chapter 2 of the Midland Code of Ordinances for Bid No. 3847, "2017 Spring Street Tree Planting"; and

WHEREAS, the low bidder, Bay Landscaping of Essexville, Michigan has provided landscaping and tree planting services to the City in the past with good results; and

WHEREAS, adequate funding for the planting of replacement outlawn trees is included in the FY 2016-2017 Forestry budget; now therefore

RESOLVED, that the Interim Assistant Controller is authorized to issue a purchase order to Bay Landscaping of Essexville, Michigan not to exceed $47,500 for the planting of replacement trees in the city rights-of-way in accordance with the proposal and City specifications. (Motion ADOPTED.)

SLIDE-IN SALTER BODY PURCHASE FOR EXISTING UNIT

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the City owns a tandem axle dump truck (unit 3-38) equipped for snow removal but lacking the mechanism to apply salt to the roadway; and

WHEREAS, purchasing a slide-in salting body would make the truck more efficient for winter operations by eliminating the need for a second truck to follow with deicing materials on board; and

WHEREAS, competitive bids for snow/ice control trucks and associated deicing equipment were solicited by the City of Rochester Hills, Michigan on behalf of several Michigan municipalities including the City of Midland with pricing effective through November 2018; and

WHEREAS, sufficient funding for the purchase of a slide-in salting body to be used in existing City unit 3-38 for winter operations is included in the FY 2016-2017 Equipment Revolving Fund budget for Capital Outlay - Vehicles; and

WHEREAS, the net low bid meeting specifications for a slide-in salting body compatible with unit 3-38 was offered by Truck and Trailer Specialties of Dutton, MI; now therefore

RESOLVED, that the Interim Assistant Controller is authorized to issue a purchase order to Truck and Trailer Specialties of Dutton, Michigan in the amount of $43,200.00 for the purchase of one slide-in salter body and installation, all in accordance with the Rochester Hills bid contract. (Motion ADOPTED.)

SMALL DUMP TRUCK WITH PLOW

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, bids for vehicles and truck equipment are solicited by the State of Michigan and Macomb County annually, and the City of Midland is authorized to make purchases from these extended purchasing programs; and

WHEREAS, sufficient funding for the purchase of one small dump truck with a front mount snow plow to replace an aging unit is included in the FY 2016-17 Equipment Revolving Fund budget for Capital Outlay, Vehicles; now therefore

RESOLVED, that the Interim Assistant Controller is authorized to issue a purchase order to Macomb County's selected vendor, Signature Ford of Owosso, Michigan, in the amount of $29,744.00 for the purchase of one 4x4 truck cab and chassis, and to Knapheide Truck Equipment of Flint, Michigan, in the amount of $22,794.00 for the purchase of the associated truck equipment and installation, all in accordance with Macomb County and the State of Michigan Extended Purchasing Programs proposals and specifications. (Motion ADOPTED.)

PARK MOWING SERVICES

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, sealed proposals were advertised and received in accord with Article II of Chapter 2 of the Midland Code of Ordinances for furnishing mowing services for various park properties within the City of Midland; and

WHEREAS, the bid period covers a one year period with an option to extend the bid for an additional two years if staff are satisfied with the results, and while sufficient funds have been appropriated for fiscal year 2016-17, extension of the bid is dependent on future funds being appropriated; now therefore

RESOLVED, that the Interim Assistant Controller is hereby authorized to issue a purchase order to Total Lawn Care of Otter Lake, Michigan in the amount of $9,258 for the purchase of park mowing services for the remainder of fiscal year 2016-17; and
RESOLVED FURTHER, that the Interim Assistant Controller is authorized to issue a purchase order in the amount of $23,143 for the months of July through November 2017, provided that funds are appropriated in the fiscal year 2017-18 Parks budget. (Motion ADOPTED.)

UNLEADED FUEL PURCHASE

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, City Council adopted a resolution on December 17, 2007 that allows for the purchase of full tankers of unleaded gasoline and diesel fuel exceeding $20,000, and seek approval for the purchase at the next City Council meeting; and
WHEREAS, City Council reviewed the process on December 21, 2009 and decided to continue as it still provides a significant cost savings to the City; and
WHEREAS, the volatility of the fuel market does not allow for staff to follow the usual sealed bid process for purchases exceeding $20,000; and
WHEREAS, staff instead uses a competitive bid process whereby fuel vendors fax in prices that are valid for a particular day with the bid awarded to the lowest priced vendor; now therefore
RESOLVED, that the requirements for sealed proposals for the purchase of fuel are waived due to the volatility of the fuel market; and
RESOLVED FURTHER, that the purchase of 13,400 gallons of E10 ethanol blend unleaded fuel from Super Flite Oil of Saginaw, Michigan for $20,495.30 executed by the Interim Assistant Controller on February 15, 2017, is hereby approved. (Motion ADOPTED.)

DIESEL FUEL PURCHASE

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, City Council adopted a resolution on December 17, 2007 that allows for the purchase of full tankers of unleaded gasoline and diesel fuel exceeding $20,000, and seek approval for the purchase at the next City Council meeting; and
WHEREAS, City Council reviewed the process on December 21, 2009 and decided to continue as it still provides a significant cost savings to the City; and
WHEREAS, the volatility of the fuel market does not allow for staff to follow the usual sealed bid process for purchases exceeding $20,000; and
WHEREAS, staff instead uses a competitive bid process whereby fuel vendors fax in prices that are valid for a particular day with the bid awarded to the lowest priced vendor; now therefore
RESOLVED, that the requirements for sealed proposals for the purchase of fuel are waived due to the volatility of the fuel market; and
RESOLVED FURTHER, that the purchase of 12,000 gallons of Winter Blend diesel fuel from Tri-Lakes Petroleum of Alma, Michigan for $20,130 executed by the Interim Assistant Controller on February 23, 2017, is hereby approved. (Motion ADOPTED.)

2017 BOSTON & KENTWOOD RECONSTRUCTION AND WATER MAIN

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, sealed proposals have been advertised and received in accord with Article II of Chapter 2 of the Midland Code of Ordinances for street reconstruction on Boston Street from St.

Andrews to Sugnet and street reconstruction and water main replacement on Kentwood Drive from E. Ashman to Corrinne; and
WHEREAS, funding for this project is provided by the Local Street Fund and the Water Fund; now therefore
RESOLVED, that the low sealed proposal submitted by The Isabella Corporation of Mt. Pleasant, Michigan, for the "2017 Boston & Kentwood Reconstruction and Water Main; Contract No. 08", in the indicated amount of $371,793.60, based upon City estimated quantities is hereby accepted and the Mayor and the City Clerk are authorized to execute a contract therefore in accord with the proposal and the City's specifications; and
RESOLVED FURTHER, that the City Manager has the authority to approve change orders modifying or altering this contract in an aggregate amount not to exceed $20,000.00. (Motion ADOPTED.)

2017 MDOT LOCAL AGENCY PROJECTS SERVICES/MANAGEMENT

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the Engineering Department has determined a need for outside project management and construction engineering services for the "2017 MDOT Local Agency Projects Construction Engineering Services/Project Management" project; and
WHEREAS, proposals were received from interested engineering firms in accordance with the City's purchasing policy; and
WHEREAS, funding for said project is provided by the Major Street Fund; now therefore
RESOLVED, that the proposal received from OHM Advisors of Midland, Michigan is hereby accepted; and
RESOLVED FURTHER, that the City Council authorizes a purchase order in the amount of $92.450.00 for project management and construction engineering services on the "2017 MDOT Local Agency Projects Construction Engineering Services/Project Management" based on rates provided and estimated hours; and
RESOLVED FURTHER, that the City Manager has the authority to approve any changes to the purchase order in an aggregate amount up to $10,000. (Motion ADOPTED.)

2017 E. MEADOWBROOK RECONSTRUCTION & WATER MAIN

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, sealed proposals have been advertised and received in accord with Article II of Chapter 2 of the Midland Code of Ordinances for the water main replacement and street reconstruction on E. Meadowbrook Drive from Jefferson Avenue to Washington Street; and
WHEREAS, funding for this project is provided by the Local Street Fund and the Water Fund; now therefore
RESOLVED, that the low sealed proposal submitted by Sova Excavating & Trucking, Inc. of Midland, Michigan, for the "2017 E. Meadowbrook Reconstruction and Water Main; Contract No. 07", in the indicated amount of $590,342.25, based upon City estimated quantities is hereby accepted and the Mayor and the City Clerk are authorized to execute a contract therefore in accord with the proposal and the City's specifications; and
RESOLVED FURTHER, that the City Manager has the authority to approve change orders modifying or altering this contract in an aggregate amount not to exceed $20,000.00. (Motion ADOPTED.)

MDOT CONTRACT 17-5034; RECONSTRUCTION OF E. SAINT ANDREWS ROAD

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the City of Midland desires to reconstruct E. Saint Andrews Road from Washington Street to E. Sugnet Road; and

WHEREAS, the City of Midland is a member of the Midland Area Transportation Study (MATS), through which funding is available from the Michigan Department of Transportation (MDOT) to cost share street reconstruction; and

WHEREAS, Contract 17-5034, prepared by MDOT and to be reviewed by the City Attorney, specifies a cost sharing agreement to be used for the project; and

WHEREAS, funding available for construction through MDOT is the lesser of $320,000 or 81.85 percent; and

WHEREAS, the City of Midland is responsible for the balance of the construction project cost, based on current estimate to be $74,400; and

WHEREAS, the funding for the City share is available in the Major Street Fund; now therefore

RESOLVED, that City Council authorizes the Mayor and City Clerk to sign and execute the project cost share agreement with MDOT once approved by the City Attorney, related to said improvements. (Motion ADOPTED.)

ZONING PETITION NO. 610

Assistant City Manager for Development Services Brad Kaye presented information on the public hearing required for Zoning Petition No. 610 – rezoning property at 506 and 718 East Buttles Street from RC Regional Commercial zoning to Downtown zoning. Paul Barbeau, President of the Michigan Baseball Foundation, spoke in favor of moving this request forward. The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Arnosky:

WHEREAS, a public hearing was held by the Planning Commission on Tuesday, February 28, 2017 for property located at 506 and 718 East Buttles Street for the purpose of considering the advisability of amending the Zoning Map of Ordinance No. 1585, the Zoning Ordinance of the City of Midland, from Regional Commercial zoning to Downtown zoning; now therefore

RESOLVED, that notice is hereby given that a public hearing will be held by the City Council on Monday, April 10, 2017, at 7:00 p.m. in the Council Chambers, City Hall, for the purpose of considering the advisability of amending the Zoning Map of Ordinance No. 1585, the Zoning Ordinance of the City of Midland, as set forth in the following proposed Ordinance, which is hereby introduced and given first reading; and

RESOLVED FURTHER, that the City Clerk is hereby directed to notify property owners within three hundred (300) feet of the area proposed to be rezoned by transmitting notice on or before March 24, 2017 and to publish said notice on March 25, 2017.

ORDINANCE NO. _____

AN ORDINANCE TO AMEND ORDINANCE NO. 1585, BEING AN ORDINANCE TO REGULATE AND RESTRICT THE LOCATION OF TRADES AND INDUSTRIES AND THE LOCATION OF BUILDINGS DESIGNED FOR SPECIFIC USES, TO REGULATE AND LIMIT THE HEIGHT AND BULK OF BUILDINGS HEREAFTER ERECTED OR ALTERED, TO REGULATE AND DETERMINE THE AREA OF YARDS, COURTS, AND OTHER OPEN SPACES SURROUNDING BUILDINGS, TO REGULATE AND LIMIT THE DENSITY OF POPULATION, AND FOR SAID PURPOSES, TO DIVIDE THE CITY INTO DISTRICTS AND PRESCRIBE PENALTIES FOR THE VIOLATION OF ITS PROVISIONS BY AMENDING THE ZONING MAP TO PROVIDE A DOWNTOWN ZONING DISTRICT WHERE A REGIONAL COMMERCIAL ZONING DISTRICT PRESENTLY EXISTS.

The City of Midland Ordains:
Section 1. That the Zoning Map of Ordinance No. 1585, being the Zoning Ordinance of the City of Midland, is hereby amended as follows:

506 EAST BUTTLES STREET
ALL OF BLK 49 ORIGINAL PLAT OF MIDLAND
718 EAST BUTTLES STREET
LOTS 9 THRU 16 BLK 48 LARKINS ADD & LOTS 1,2,3,4,7,8 BLK 48 ORIGINAL PLAT OF MIDLAND

Be, and the same is hereby changed to Downtown zoning.
Section 2. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.
Section 3. This Ordinance shall take effect upon publication. (Motion ADOPTED. Considered first reading.)

PROPOSED 2017-18 COMMUNITY DEVELOPMENT BLOCK GRANT BUDGET

The following resolution was offered by Councilman Brown Wilhelm and seconded by Councilman Wazbinski:

WHEREAS, the City of Midland is estimated to receive $240,000 in Community Development Block Grant (CDBG) funds for fiscal year 2017-18 from the U.S. Department of Housing & Urban Development; and
WHEREAS, it is expected that the City will have a fund balance of $86,405 that will be carried over from prior fiscal years; and
WHEREAS, it is expected that the City will receive a total of $15,000 in program income during the 2017-18 fiscal year; and
WHEREAS, CDBG revenues totaling $341,405 must be programmed to activities that meet the statutory goals and the City's objectives of the CDBG program, as outlined in the 2015-2020 Consolidated Plan; and
WHEREAS, on March 6, 2017, the Housing Commission unanimously recommended approval of the proposed 2017-18 CDBG budget, as set forth in the attached table (Attachment A), which meets said goals and objectives of the CDBG program; and
WHEREAS, it is necessary to provide an opportunity for public input on the proposed expenditure of said funds in accordance with the required 30-day public comment period to commence on Tuesday, March 21, 2017; now therefore
RESOLVED, that a public hearing will be held on April 24, 2017, for the purpose of receiving public input on the use of federal funds through the City's Community Development Block Grant program, as set forth in the attached table (Attachment A). (Motion ADOPTED.)

Being no further business the meeting adjourned at 8:00 p.m.

_____
Selina Tisdale, City Clerk

Backup material for agenda item:

2. Proclamation recognizing Chemical Bank in celebration of its 100th anniversary. LYNCH

SUMMARY REPORT TO COUNCIL
for City Council Meeting of March 27, 2017

SUBJECT: PROCLAMATION OF RECOGNITION IN CELEBRATION OF CHEMICAL BANK'S 100TH ANNIVERSARY

RESOLUTION SUMMARY: This resolution authorizes the Mayor to issue a proclamation of recognition to Chemical Bank in celebration of its 100th anniversary.

ITEMS ATTACHED:

1. Letter of transmittal
2. Resolution
3. Proclamation

COUNCIL ACTION:

3/5 vote required to approve resolution

Jon Lynch
City Manager, AICP ICMA-CM

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax • www.cityofmidlandmi.gov

March 23, 2017

Honorable Mayor and City Council
City of Midland
Michigan

Dear Councilmen:

On March 14, 2017 Chemical Bank celebrated its 100th anniversary. Attached is a resolution that authorizes the Mayor to issue a proclamation offering our congratulations and gratitude to Chemical Bank and recognizes contributions by Chemical Bank, its employees, and its customers to our community.

Sincerely,

Jon Lynch, AICP ICMA-CM
City Manager

City Hall ♦ 333 West Ellsworth Street ♦ Midland, Michigan 48640-5132 ♦ 989.837.3300 ♦ 989.835.2717 Fax ♦ www.cityofmidlandmi.gov

BY COUNCILMAN

RESOLVED, that the Mayor is authorized to issue a Proclamation of Recognition to Chemical Bank in celebration of their 100th anniversary and offer our congratulations and gratitude for the outstanding contributions made by Chemical Bank, its employees, and its customers to our community.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

T:Chemical Bank resolution

CITY OF Midland

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IN RECOGNITION

***WHEREAS**, on March 14, 1917 Chemical State Savings Bank came to life with just $50,000 and three employees; and*

***WHEREAS**, today Chemical Financial Corporation, through its subsidiary bank, Chemical Bank, operates 249 banks with assets of $17.36 billion and 3,500 employees; and*

***WHEREAS**, during the Great Depression Chemical State Savings Bank was one of few in the county that paid depositors in full, protecting their financial interests; and*

***WHEREAS**, in 1973 Chemical Financial Corporation was formed with Mr. Alan Ott named its first President and CEO; and*

***WHEREAS**, in 1988 Board Chairman Gilbert A. Currie made the first purchase of CHFC stock trading on Nasdaq; and*

***WHEREAS**, on March 14th, in celebration of its 100th anniversary Mr. David Ramaker, current Chairman, President and CEO of Chemical Bank, jointly with Mr. Ott, rang the opening bell at Nasdaq in New York City; and*

***WHEREAS**, the company has been headquartered on Main Street in Midland since its inception; now*

***THEREFORE**, we, the Mayor and the City Council of the City of Midland, Michigan, do hereby proclaim our congratulations and gratitude to Chemical Bank and recognize the outstanding contributions made by Chemical Bank, its employees, and its customers to our community.*

Issued by Council Authorization
Given Monday, March 27, 2017

_____
Maureen Donker, Mayor

Attest:

_____
Selina Tisdale, City Clerk

Backup material for agenda item:

3. Receiving and filing the Eastman Avenue Corridor Study update. MCMANUS

SUMMARY REPORT TO THE CITY MANAGER
for Council Meeting of March 27, 2017

SUBJECT: Eastman Avenue Improvements - Update

INITIATED BY: City of Midland Engineering Department

RESOLUTION SUMMARY: This resolution receives and files the Eastman Avenue Corridor Study update prepared by DLZ, Michigan.

ITEMS ATTACHED:
1. Cover Letter
2. Resolution
3. Eastman Avenue Corridor Study
4. Location Map

CITY COUNCIL ACTION: 3/5 vote required to approve resolution

SUBMITTED BY: Brian P. McManus, City Engineer

JNF
EastmanStudy_RPT

CITY OF Midland

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DATE: March 22, 2017

TO: Jon Lynch, City Manager

FROM: Joshua Fredrickson, Assistant City Engineer

RE: Eastman Avenue Corridor Study - Update

For many years the Eastman Avenue and Joe Mann Boulevard areas have experienced commercial growth. This growth has resulted in additional traffic on the area roadways. A traffic study to address roadway capacity has previously been performed which resulted in the development of various alternatives. Since the time of the original report, several properties along Eastman have been redeveloped and new developments have been built along Joe Mann Blvd. New streets have also been built, including an extension of Commerce Drive to Jefferson Avenue.

Eastman Avenue traffic congestion has been a community concern for several years. In 2005 the City of Midland commissioned DLZ, Michigan (DLZ) to perform a study of traffic conditions along the Eastman Corridor generally between Wackerly Street and Joe Mann Boulevard and derive potential solutions. In addition, an open public process using the public relations firm of Kezziah-Watkins was utilized for community input.

Three primary alternatives were developed by DLZ. The alternatives included:

Alternative 1 – Boulevard with Signalized Intersections - $11.8 Million
Alternative 2 – Narrow Boulevard with Roundabouts - $10.4 Million
Alternative 3 – One Way Pair with Signalized Intersections - $12.7 Million

A public process called the Eastman Avenue Design Series (EADS) was implemented after the results of the initial public process indicated that the community desired a lower cost improvement. A phase-in of Alternative #1 was chosen, at a cost of $3.8M, as the interim preferred alternative to move forward with, and design of this interim option began in 2007. Design plans were completed and right-of-way acquisition began. In 2008 the project was put on hold because of the poor economic conditions and recession.

Acquisition of property needed to construct improvements is a large component of this project. These rights-of-way costs may be as much as or more than the actual costs of construction. Since 2007 we have acquired some of the properties needed. The attached map indicates property that has been purchased by the City.

In August of 2015 the Michigan Department of Transportation (MDOT) began a corridor study of the US-10 Business Route from Washington Street to US-10 at Eastman Avenue. The primary objective of their work was to identify potential corridor improvements to US-10 BR that would alleviate traffic congestion, enhance safety, increase connectivity, eliminate barriers for non-motorized transportation, be context sensitive and support economic development. The results of that study will be presented to City Council separately. In conjunction with the US-10 Business Route corridor study, the City contracted with DLZ to update the Eastman Avenue Corridor Study from US-10 to Joe Mann Boulevard.

The purpose of the current Eastman Avenue Corridor Study (DLZ 2017) was to re-evaluate and update the Eastman Avenue Interim Alternatives Study (DLZ 2006) Preferred Alternative using updated traffic volumes. The study update also provides recommendations regarding what improvements should be included as part of the Updated Preferred Alternative, based on the evaluation of the new traffic volumes.

The work performed by DLZ to update the corridor study included updating the traffic model using current traffic values. The traffic growth rate used in the 2006 study was also reviewed and revised based on existing conditions and projections. The updated traffic volumes and growth projections were also used to update the capacity analysis and model. As part of the work, DLZ also reviewed the alternatives presented in the 2006 study and updated these alternatives based on current traffic model information. The alternatives were reviewed to determine if implementing the preferred alternative would still be valid to improve capacity.

The update to the corridor study indicates that traffic volumes have not increased at the rate projected in 2006. This can be attributed to harsh economic realities seen throughout Michigan affecting employment commuting and leisure trips. The reduction in traffic volume and growth has impacted the overall capacity projection for Eastman Avenue. The findings of the corridor study update indicate that based on the current traffic volumes, the interim preferred alternative chosen in 2006 is a valid solution to help reduce traffic congestion along this section of Eastman Avenue. The updated traffic data and capacity analysis further identified that this interim preferred alternative from 2006 is able to accommodate anticipated growth for 20 years.

In order to implement the design of the interim preferred alternative, additional right-of-way is required. To reduce acquisition costs of additional right-of-way, an alignment adjustment to Eastman Avenue between Wackerly Road and the mall entrance has been presented to MDOT. This alignment shifts Eastman Avenue to the east, effectively reducing the amount of right-of-way required to build the additional southbound lanes described in the interim preferred alternative. This alignment shift proposal impacts the entrance and exit ramps to westbound US-10 and is being reviewed by MDOT.

In addition to the capacity issue, the roadway surface condition of Eastman Avenue from Airport Road to Joe Mann Boulevard is beginning to show signs of deterioration and reaching the criteria

to be replaced. A project has been identified and included in the annual project priority process to resurface this section of Eastman Avenue. MDOT is also planning a resurfacing project from Wackerly Street to Airport Road. The City is working with MDOT to coordinate the timing of the resurfacing work. The available funding for the City project addresses the surface condition, and not the overall roadway capacity.

To effectively utilize available funding and gain the economies of construction, design development of the resurfacing of Eastman Avenue from Airport Road to Joe Mann Boulevard will move forward in coordination with the MDOT design to resurface Eastman Avenue from Wackerly Street to Airport Road. The design of a right turn lane for southbound Eastman Avenue traffic at Airport Road will be reviewed for inclusion with the design. City Staff will also pursue approval from MDOT to shift Eastman Avenue to the east between Wackerly Street and the mall entrance to minimize the required right-of-way acquisition needs. A report back to City Council will be provided in December to update on the status of these items.

DLZ will be present at the meeting to provide the results of their study.

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BY COUNCILMAN

WHEREAS, DLZ, Michigan, has updated the Eastman Avenue Corridor Study; and

WHEREAS, the City Engineering Department has reported on the status of updated corridor study; now therefore

RESOLVED, that City Council hereby receives and files the Eastman Avenue Corridor Study update report.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

EastmanStudy_RES
JNF

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

OFFICE MEMORANDUM

DATE: March 21, 2017

TO: Brian McManus – City of Midland Engineer

FROM: Jason Whitten, Wes Butch - DLZ

SUBJECT: Eastman Avenue Corridor Study

1.0 Introduction

1.1 STUDY PURPOSE

The purpose of this Eastman Avenue Corridor Study was to re-evaluate the *Eastman Avenue Interim Alternatives Study (DLZ 2006)* Preferred Alternative using updated traffic volumes, including year 2040 traffic projections. The study also provides recommendations regarding what improvements should be included as part of the Updated Preferred Alternative, based on the evaluation of the new traffic volumes.

This Eastman Avenue Corridor Study has limits from just north of Joe Mann Boulevard to just north of Airport Road. This memo summarizes the results of capacity analyses for existing conditions, No Build conditions, Recommended Improvements from the 2006 Interim (previous Preferred Alternative), Study Recommended Improvements from the 2006 Interim Study with a roundabout at Joe Mann Boulevard, and the updated Preferred Alternative developed as part of this study.

1.1 PREVIOUS STUDIES

The *Eastman Avenue Traffic Study (EATS) (DLZ 2005)* identified a long-range Preferred Alternative (Three-Lane Boulevard with Signalized Intersections) along Eastman Avenue to accommodate aggressive 20-year traffic projections. Through the public involvement process of the EATS, it was determined that a lower cost, shorter-term alternative was preferred to the recommended long-term alternative. As a result, the *Eastman Avenue Interim Alternatives Study* was initiated.

The study area for the 2006 *Eastman Avenue Interim Alternatives Study* extended from just north of Joe Mann Boulevard to just south of Wackerly Street. After the 2006 study, the City of Midland prepared roadway improvement plans (dated March 17, 2008) for the Preferred Alternative from Wackerly Street to Airport Road. The plans were reviewed and approved by MDOT, but have not yet been constructed.

This Eastman Avenue Corridor Study was conducted in conjunction with the *US-10 Business Route Corridor Study (DLZ 2016)* initiated by the Michigan Department of Transportation (MDOT). The MDOT study included the US-10 BR corridor from Washington Street to Airport Road, which includes Eastman Avenue through the US-10 interchange area. The proposed improvements from the MDOT study are consistent with the Preferred Alternative from the 2006 *Eastman Avenue Interim Alternatives Study*.

2.0 Capacity Analysis Methodology

The *Synchro (Version 9)* and SimTraffic software programs from Trafficware were used for the analysis of traffic operations. *Synchro* is a macroscopic traffic analysis and optimization software tool that supports the *Highway Capacity Manual's* (HCM) methodology for intersection analysis (discussed below). This software tool was chosen for this study as it is widely used in the traffic engineering industry, and is also utilized by MDOT. SimTraffic, a microsimulation program packaged with SYNCHRO, was also utilized to evaluate queuing and blocking issues.

The roundabout analysis was performed using the roundabout modeling software RODEL. RODEL is a computer software program designed specifically to analyze geometry and traffic operations at roundabouts. It is generally recognized as a valuable model for this purpose and is widely used and accepted for roundabout design.

The roadway segment was evaluated using Arterial Level-of-Service (LOS). This Measure of Effectiveness (MOE) considers the delay at intersections and the speed on roadway links and gives an assessment of the overall corridor operations in terms of average running speed. Arterial LOS was calculated using the through movement delays at the intersections and the average running time between intersections based on the posted speed limit on Eastman Avenue. This analysis did not consider the effects of mid block traffic movements (i.e., driveways, minor roadways, medians, turn lanes).

The determination of what constitutes "acceptable" traffic operations at an intersection is based on the HCM Level of Service (LOS) calculated using the methods of the Transportation Research Board *Highway Capacity Manual*, 2010 Edition. The HCM details methodologies for assessing the operational characteristics of various aspects of public roads and non-motorized facilities. HCM methodologies were utilized for this project and are based on travel delay experienced by users, which is then converted to LOS. The Federal Highway Administration (FHWA) also requires the use of HCM for projects that could involve Federal funding.

LOS is a qualitative measure that describes the quality of operating conditions within the traffic stream and the perception of motorists. The LOS of an intersection is based on the total delay experienced by vehicles waiting to travel through an intersection. The LOS is defined in terms of this total delay, as measured by the average number of seconds of delay per vehicle. Vehicle delay is a means of measuring factors such as driver comfort and convenience, safety, maneuverability, fuel consumption, and lost travel time. The LOS is based on a scale of "A" to "F", with "A" being the best situation. LOS "A" describes traffic operations with very low delay (i.e., most vehicles stop only the minimum amount necessary before entering the intersection). LOS "F" indicates very high delays with long queues of vehicles. In this case, the volume often exceeds the capacity of the intersection. Traffic is interrupted and impeded to the point that it can become "gridlocked" and the capacity of the road system is greatly diminished. An intersection operating at LOS C is typically considered to have an acceptable operation by the City of Midland.

The capacity analyses were completed for five different scenarios:

1. Existing Conditions
2. Year 2040 No Build Conditions
3. Recommended Improvements from the 2006 Interim Study
4. Recommended Improvements from the 2006 Interim Study with a roundabout at Joe Mann Boulevard
5. Updated Preferred Alternative

The AM Peak and PM Peak hours were evaluated for all scenarios. The alternatives under consideration are described below in Section 5.0 Alternatives Analysis.

Table 1 summarizes the specific LOS criteria for signalized and unsignalized intersections as well as arterial segments.

Table 1. Level of Service Definitions

Level of Service	Signalized Intersections	Unsignalized Intersections*	Arterial Segment
	Average Control Delay (Seconds/Vehicle)		Average Travel Speed as a Percentage of Base Free Flow Speed (%)
A	≤10	≤ 10	> 85
B	> 10 and ≤ 20	> 10 and ≤ 15	> 67 and < 85
C	> 20 and ≤ 35	> 15 and ≤ 25	> 50 and < 67
D	> 35 and ≤ 55	> 25 and ≤ 35	> 40 and < 50
E	> 55 and ≤ 80	> 35 and ≤ 50	> 30 and < 40
F	> 80	> 50	≤ 30

Source: Transportation Research Board, *Highway Capacity Manual*, 2010
*Used for roundabout delay

3.0 Existing Conditions

3.1 CAPACITY ANALYSIS

The City of Midland provided a Synchro model for existing conditions which was used as the basis for the existing conditions analysis. This model included the existing AM and PM peak hour turning movement counts, intersection geometry, and signal timings. Using the 2010 HCM methodology, the existing LOS was determined for the study intersections and roadway segments. Under the existing conditions, the signalized intersections within the study area operate at an overall LOS C or better during the AM and PM peak hours, as shown in Table 2. The unsignalized westbound approach at the North Mall Drive would operate at LOS D during the PM peak hour.

All roadway segments are predicted to operate at LOS C or better during the AM and PM peak hours, except for southbound Eastman Avenue between North Mall Drive to Cinema Drive and from South Mall Drive to

Airport Road. The North Mall Drive to Cinema Drive segment is predicted to operate at LOS D during the PM peak hour, while the South Mall Drive to Airport Road segment is predicted to operate at LOS F during the AM and PM peak hours. Additionally, northbound Eastman Avenue from Airport Road to South Mall Drive is predicted to operate at LOS D.

See Attachment A for Synchro model outputs.

Table 2 – Intersection and Road Segment Levels of Service

Intersection	Peak Hour LOS/Average Delay									
	Existing		No Build		Alternative 1		Alternative 2		Updated Preferred	
	AM	PM	AM	PM	AM	PM	AM	PM		
Eastman Avenue/ Cinema Drive	A/6.3	B/15.1	A/7.4	B/17.0	A/8.3	B/16.3	A/8.3	B/16.3	A/7.4	B/17.4
Eastman Avenue/ North Mall Drive	C/20.5*	C/17.9*	C/24.1*	C/20.6*	C/24.1*	C/20.6*	C/24.1*	C/20.6*	C/24.1*	C/20.6*
Eastman Avenue/ Joe Mann Boulevard	A/9.6	A/9.6	A/9.8	A/10.0	A/9.8	A/9.7	A/5.5	A/5.7	A/9.8	A/10.0
Southbound Segments	**Peak Hour LOS/Average Speed**									
Joe Mann to N. Mall Dr	B/35.3	B/33.6	B/34.6	B/33.0	B/34.6	B/35.0	B/34.6	B/35.0	B/34.6	B/33.0
N. Mall Dr to Cinema Dr	B/35.3	B/20.9	B/34.0	D/18.8	B/33.0	C/25.5	B/33.0	C/25.5	B/33.0	C/25.5
Cinema Dr to S. Mall Dr	B/37.1	C/27.3	B/37.1	C/26.7	B/37.5	B/33.3	B/37.5	B/33.3	B/37.5	B/33.3
S. Mall Dr to Airport Rd	F/12.6	F/9.0	E/17.3	F/9.8	C/23.0	D/20.3	C/23.0	D/20.3	C/23.0	D/20.3
Northbound Segments	**Peak Hour LOS/Average Speed**									
Airport Rd to S. Mall Dr	C/27.9	D/21.6	C/23.4	D/20.1	C/30.0	D/21.6	C/30.0	D/21.6	C/30.0	D/21.6
S. Mall Dr to Cinema Dr	A/38.7	B/35.3	B/36.0	B/33.3	B/37.1	B/32.4	B/37.1	B/32.4	B/37.1	B/32.4
Cinema Dr to N. Mall Dr	B/35.0	C/24.5	B/32.4	D/21.6	B/31.6	C/23.1	B/31.6	C/23.1	B/31.6	C/23.1
N. Mall Dr to Joe Mann	B/34.0	C/25.2	B/32.4	C/22.9	B/31.6	C/23.5	B/31.6	C/23.5	B/32.4	C/22.9

*LOS shown for the stop-controlled movement

4.0 No Build Conditions

The "No Build" scenario assumes that normal traffic growth occurs between 2015 and the year 2040, with no capacity modifications to the existing roadway network except for projects that are already identified/planned and likely to be built (note: it was assumed that for the "No Build" scenarios, normal ongoing capital maintenance and road resurfacing/reconstruction projects would still occur consistent with the City's capital improvement plan). Evaluating expected traffic operations of the existing network in the year 2040 (based on anticipated traffic growth) helps identify potential future infrastructure needs that would not be apparent when only looking at existing traffic volumes. It is anticipated that signal modernization and optimization will occur by year 2040, and this was assumed for the No Build scenario model.

In order to evaluate the operation of the study intersections and roadway segments for the future conditions (year 2040 No Build), the *Synchro* model was updated to reflect conditions anticipated to exist in the year 2040. A future traffic volume forecast for the year 2040 No-Build scenario was developed through applying a compound annual growth factor to the existing traffic volumes. In order to develop future growth rates for the project corridor, historic ADT counts, peak hour turning movement counts, local land use and zoning plans, local transportation plans, and information from existing MDOT travel models for the area were reviewed and evaluated. Upon this review, future growth rates were developed. The growth rate used to develop future (year 2040) traffic volumes was 0.5% per year. Therefore, to develop year 2040 No Build traffic volumes, the existing traffic volumes were increased by this 0.5% per year growth rate for 25 years (2015 to 2040). See Attachment B for information regarding the traffic projections.

4.1 CAPACITY ANALYSIS

Under the year 2040 No Build conditions, the signalized intersections would operate at an overall LOS C or better during the AM and PM peak hours, as shown in Table 2. The unsignalized westbound approach at the North Mall Drive would operate at LOS D during the PM peak hour.

All roadway segments are predicted to operate at LOS C or better during the AM and PM peak hours, except for southbound Eastman Avenue between North Mall Drive to Cinema Drive and from South Mall Drive to Airport Road. The North Mall Drive to Cinema Drive segment is predicted to operate at LOS D during the PM peak hour, while the South Mall Drive to Airport Road segment is predicted to operate at LOS E and F during the AM and PM peak hours, respectively. Additionally, northbound Eastman Avenue from Airport Road to South Mall Drive and Cinema Drive to North Mall Drive is predicted to operate at LOS D.

See Attachment A for Synchro outputs.

5.0 Alternatives Analysis

5.1 ALTERNATIVE 1

The Preferred Alterative from the 2006 *Eastman Avenue Interim Alternatives Study* included the construction of two southbound lanes between Cinema Drive and Airport Road and the addition of a westbound right-turn lane at the Joe Mann Boulevard intersection. These improvements were evaluated as "Alternative 1" for this Eastman Avenue Corridor Study (See Figure 1). Alternative 1 would provide LOS C or better at all the intersections, while the segment operations would be LOS D or better for all segments.

The estimated construction cost for the Alternative 1 proposed improvements is approximately $2,180,000 in year 2016 dollars. This cost includes full reconstruction for this segment of Eastman Avenue, as it is assumed this will be needed by the design year of 2040. ROW acquisition, design, and construction engineering costs are not included. The cost estimate assumptions can be found in Attachment C - Cost Estimates.

5.2 ALTERNATIVE 2

Alternative 2 is the same as Alternative 1, except a two-lane roundabout was evaluated at the Eastman Avenue and Joe Boulevard intersection (Figure 2). Under the roundabout configuration, the northbound approach would consist of a through lane and through-right lane, and the southbound approach would consist of a through lane and through-left lane, while the westbound leg would consist of a right-left turn lane and a left-only lane. The roundabout would be 150 feet in diameter and would require the relocation of one commercial drive. As shown in Table 2, the roundabout would provide LOS A at the intersection, while the segment operations would be LOS D or better for all segments.

The estimated construction cost for the roundabout option is approximately $2,600,000 in year 2016 dollars. This cost includes full reconstruction for this segment of Eastman Avenue, as it is assumed this will be needed by the design year of 2040. ROW acquisition, design, and construction engineering costs are not included. The roundabout option cost estimate assumptions can be found in Attachment C- Cost Estimates.

5.1 UPDATED PREFERRED ALTERNATIVE

Based on the traffic analysis described above, two southbound lanes should be added between Cinema Drive and Airport Road. One lane would be designated for through movements, and one lane would be designated as right-turn only at Airport Road. See Figure 3 which shows the Updated Preferred Alternative. This alternative was designed to tie into the proposed improvements for the *US-10 BR Corridor Study*. As shown in Table 2, the proposed improvements would provide acceptable LOS at all of the intersections and segments along Eastman Avenue.

With the new traffic volumes evaluated as part of this study, the additional westbound right-turn lane at the Joe Mann Boulevard intersection, which was recommended as part of the 2006 study, is no longer recommended.

The estimated construction cost for the proposed improvements is approximately $2,165,000, in year 2016 dollars. ROW acquisition, design, and construction engineering costs are not included. As part of the cost estimate, it was assumed Eastman Road would be reconstructed north of Cinema Drive. The cost estimate assumptions can be found in Attachment C - Cost Estimates.

ACCESS MANAGMENT

Access Management is a process or program intended to ensure the major roadway systems will operate safely and efficiently through reduction of access points (i.e., driveways and curb cuts), spacing of traffic signals, and increasing cross-property connections, while adequately meeting the access need of abutting land uses and businesses along the roadway. The use of access management techniques is intended to increase roadway capacity, manage congestion, and reduce crashes. A lack of an access management policy can adversely affect roadway operations and safety by:

- Increasing crash rates
- Aiding in a greater number of conflicts and potential hazards between vehicles, bicycles, and pedestrians
- Diverting through traffic into abutting neighborhoods to avoid congestion
- Increasing congestion with slower travel speeds and delays to arterial traffic

A lack of an access management policy can also result in a decrease in development due to poor aesthetics of a corridor for new business. A typical access management strategy involves gradually removing or relocating access points that are the least conforming. This can be accomplished in a number of ways:

1. Voluntary closure by the property owner.
2. Closure as part of a transportation improvement project – in some cases owners can agree to the access improvement as part of a transportation improvement project at no cost, they then could avoid paying for the change that may be required later by the City.
3. Access improvement as part of the use or site plan approval for new development, a change in use or expansion that increases traffic.
4. As part of the City's access permit review and approval.

The City could explore potential access management opportunities/strategies as part of any capital improvement projects to be constructed within the project area.

5.0 Conclusion

The Preferred Alternative from the 2006 *Eastman Avenue Interim Alternatives Study* was reevaluated to determine if any changes are needed based on updated traffic volumes. This analysis found that:

1. The Preferred Alternative from the 2006 interim study should be implemented from Cinema Drive to Airport Road.
2. No road improvements are required north of Cinema Drive.
3. The additional westbound right-turn lane at the Joe Mann Boulevard intersection is no longer recommended.
4. The Updated Preferred Alternative accommodates the updated 20-year traffic projections. Therefore, the long-term improvements (Three-Lane Boulevard) proposed as part of the EATS are no longer warranted.

In addition to the roadway improvements, access management measures are also recommended for consideration.

Finally, it is recommended that the City would perform additional refinements of the traffic analysis and base design for the portion of Eastman Avenue between Cinema Drive and Wackerly Street. This will require additional coordination with MDOT, as they have jurisdiction from Airport Road to the south.

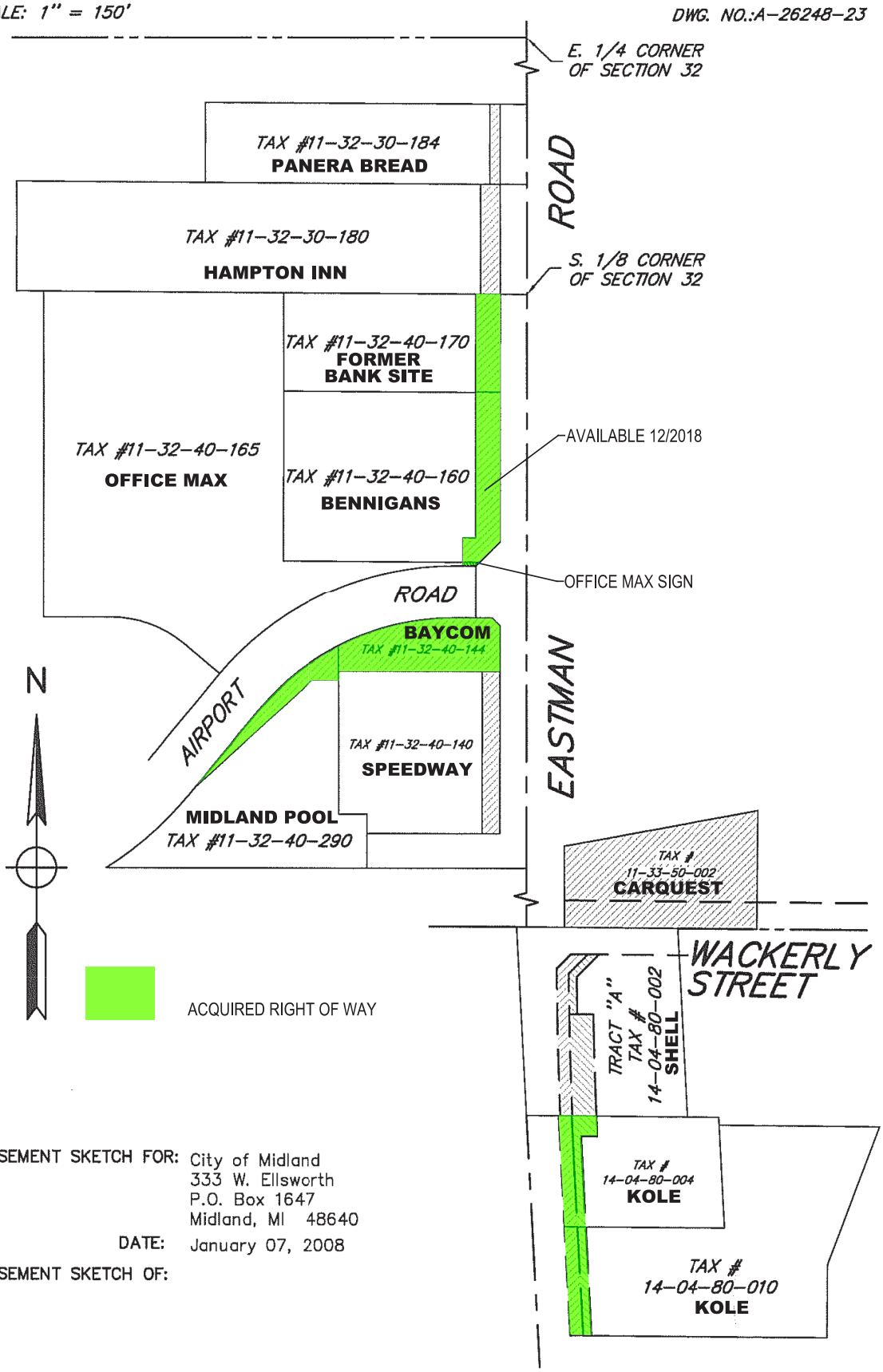
M:\PROJ\1541\6697 Eastman Ave Study\Memo\Eastman Ave Memo (3-21-17).docx

OVERALL SHEET

Spicer Group
230 S. Washington Avenue
P.O. Box 1689
Saginaw, MI 48605-1689
TEL (989) 754-4717
FAX (989) 754-4440

SCALE: 1" = 150'

DWG. NO.:A-26248-23



EASEMENT SKETCH FOR: City of Midland
333 W. Ellsworth
P.O. Box 1647
Midland, MI 48640

DATE: January 07, 2008

EASEMENT SKETCH OF:

REVISED: 12-10-08 REVISED: 04-12-10	DRAWN BY: MJE CHECKED BY: JEW	PLOT DATE: 01-07-08 12:01 SHEET 23 OF 23	JOB#: S115078.07 DWG#: A-26248-23

Backup material for agenda item:

4. Receiving and filing the US-10 Business Route Corridor Study. MCMANUS

SUMMARY REPORT TO THE CITY MANAGER
for Council Meeting of March 27, 2017

SUBJECT: US-10 Business Route Corridor Study

INITIATED BY: City of Midland Engineering Department

RESOLUTION SUMMARY: This resolution receives and files the US-10 Business Route Corridor Study prepared by DLZ, Michigan and MKSK Studios for the Michigan Department of Transportation.

ITEMS ATTACHED:
1. Cover Letter
2. Resolution
3. US-10 Business Route Corridor Study

CITY COUNCIL ACTION: 3/5 vote required to approve resolution

SUBMITTED BY: Brian P. McManus, City Engineer

JNF
BR10_CorridorStudy_RPT

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

DATE: March 22, 2017

TO: Jon Lynch, City Manager

FROM: Joshua Fredrickson, Assistant City Engineer

RE: US-10 Business Route Corridor Study

The Michigan Department of Transportation (MDOT), knowing of the increase in building activity in Midland and the location of their street network and facilities within the Downtown Development Authority boundaries, initiated a traffic study of the US-10 Business Route corridor. This project study focused on the US-10 BR corridor between Washington Street to the US-10 interchange at Eastman Avenue. The study was performed by DLZ, Michigan and MKSK Studios. This study, which began in 2015, has recently concluded.

The corridor study included an assessment of current traffic conditions and roadway characteristics. Estimates of future growth were established along with the development of project and policy recommendations to address future conditions. Recommendations from the study include typical roadway characteristics, recommend intersection configurations, safety and traffic flow improvements as well as pedestrian, bicycle and transit improvements. In addition, recommendations regarding the intensity and design of future land use development in this portion of the City of Midland have been included.

Data collection efforts for the corridor study included obtaining traffic counts, intersection turning movement volumes, traffic signal phasing and timings, crash information and land use. Utilizing this data, an analysis of key intersections and segments has been completed. The crash data was analyzed and any identified deficiencies in intersection and segment operations or crash patterns were further evaluated. The analysis included a capacity analysis of the existing conditions and future conditions using the projected traffic growth rates. Also included was a review of non-motorized facilities.

The corridor study included a Steering Committee and a Stakeholder Committee. The Steering Committee met to identify the project goals, areas of concern and needs. The Stakeholder Committee was engaged to obtain input regarding specific problems or deficiencies, future planned transportation improvements and potential land-use changes. These committees provided input and feedback related to the design alternatives. In addition to the committee meetings, a Public Information Meeting was held to solicit public input regarding the project. This input was considered for the overall outcome of the alternatives presented in the corridor study.

Through the data analysis and public input process, three alternatives were developed and included in the corridor study. Alternative 1 has been selected as the preferred alternative. This alternative reduces the number of travel lanes on the one-way sections of US-10 BR. In addition, access management strategies are recommended to be implemented as part of this preferred alternative. Alternative 1 was selected due to its ability to provide acceptable levels of traffic operations, an improved pedestrian experience by reducing the number of traffic lanes required to cross US-10 BR and its low cost. This option also does not generate the right-of-way impacts as other alternatives while also providing the best opportunity to accommodate non-motorized users.

We recommend that additional public input be sought, including an open house and a social media component to obtain input related to the preferred alternative. This will further allow the City and MDOT to inform the public about the alternative, solicit additional comments and help select preferred non-motorized options.

The resolution accepts and files the US-10 Business Route Corridor Study. Once the preferred alternative is commented on by the public through the additional public process, feedback will be presented to Council and support for a recommendation to MDOT will be solicited.

DLZ and MDOT will be available to present the corridor study.

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BY COUNCILMAN

WHEREAS, the Michigan Department of Transportation (MDOT) has commissioned DLZ, Michigan to perform a corridor study of US-10 Business Route within the city of Midland; and

WHEREAS, the corridor study information has been presented; now therefore

RESOLVED, that City Council hereby receives and files the US-10 Business Route Corridor Study.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____
Selina Tisdale, City Clerk

BR10_CorridorStudy_RES
JNF

US-10 Business Route Corridor Study

Midland, Michigan

December 2016

Prepared By:

DLZ Michigan, Inc.

MKSK Studios, Inc.

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FIGURES

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APPENDICES

1.0 PROJECT BACKGROUND

1.1 Introduction

The US-10 Business Route (BR) Corridor Study was commissioned by the Michigan Department of Transportation (MDOT). The project study is focused on the US-10 BR corridor through the City of Midland (City) from Washington Street to the US-10 and US-10 BR (Eastman Avenue) interchange (Figure 1). US-10 BR is a principal arterial road within the City of Midland, connecting the southeast side of the City with the northern portion of the City. Other arterial roads that intersect US-10 BR include Jefferson Avenue, Rodd Street, Ashman Street, Saginaw Road, and Wackerly Street. From Washington Street to Hines Street, US-10 BR is split into a one-way pair with Indian/Patrick Street traveling westbound and Buttles/Lyon Street traveling eastbound. The one-way pair joins together at Eastman Avenue and runs north and south to the US-10 interchange.

The study included a corridor-wide data collection effort to obtain historical Average Annual Daily Traffic (AADT) volumes, intersection turning movement volumes, traffic signal phasing and timings, crashes, and land uses. Using the traffic volumes, an analysis of key intersections and segments was completed. The crash data was analyzed to identify any crash patterns or locations with high crash rates. Any identified deficiencies in intersection and segment operations or crash patterns were further evaluated to develop mitigation measures to improve the operation or reduce crashes such as the installation of a signal, retiming of an existing traffic signal, lane addition, and/or geometric improvements etc. These mitigation measures were then developed into three unique alternatives.

The report is broken into four main sections, each of which describes an important element of the study:

- Introduction
- Baseline Traffic Analysis
- Road Improvement Alternatives
- Conclusions and Recommendations

1.2 Project Purpose

The purposes of the project are to identify potential corridor improvements to US-10 BR that will:

1. Accommodate the design year (2040) traffic volumes
2. Alleviate current and anticipated traffic congestion at the project area intersections and along the road segments
3. Enhance safety and reduce crashes for all modes of transportation
4. Increase connectivity to Downtown Midland and Discovery Square
5. Improve non-motorized mobility and eliminate barriers for bicyclists/pedestrians with minimal impacts to traffic flow
6. Context Sensitive Design
7. Support economic development within the corridor

1.3 Corridor Characteristics

Due to the varying characteristics in different parts of the corridor, the study was broken out into three individual segments for analysis. The three segments include:

1. Segment 1 – Washington Street to West Hines Street (One-Way Pair Segment)
    - Westbound US-10 BR (Indian Street/Patrick Road)
    - Eastbound US-10 BR (Buttles Street/Lyon Road)
2. Segment 2 – West Hines Street to East Wackerly Street
3. Segment 3 – East Wackerly Street to Airport Road (US-10/US-10 BR Interchange Area)

Within Segment 1, US-10 BR is made up of a one-way pair segment; Indian Street/Patrick Road (westbound) and Buttles Street/Lyon Road (eastbound) with three travel lanes in each direction. From Hines Street to Sugnet Street (Segment 2), the roadway is a four-lane cross section with two travel lanes in each direction, except at the St. Andrews Street and Sugnet Street intersections where northbound and southbound left turn lanes have been added. From Sugnet Street to Wackerly Street, US-10 BR consist of a five-lane roadway with two travel lanes in each direction and a continuous two-way, left-turn lane (TWLTL). Segment 3 is generally a seven-lane cross section consisting of three travel lanes in each direction and a TWLTL.

1.4 Public Involvement

Two meetings were held with the Steering Committee to identify the project purpose and goals, areas of concern, known problems and constraints (e.g., operational deficiencies, safety concerns, pedestrian facilities, etc.), future developments, opportunities within the corridor, non-motorized needs, and potential transportation improvement alternatives. The Steering Committee consisted of staff from the MDOT - Bay Region, MDOT Mt. Pleasant Transportation Service Center (TSC), City of Midland, and Midland Area Transportation Study (MATS).

Stakeholder input was a valuable factor considered as the team carried out the study. As part of the study process, a Stakeholder Committee was engaged to obtain input regarding specific problems or deficiencies, data or reports that would benefit the study, future planned transportation improvements, potential land-use changes, and other topics of interest to each participant. The comments and input received were considered as the study was conducted, including in the selection of a Preferred Alternative. The Stakeholder Committee consisted of representatives from Discovery Square, Momentum Midland, City of Midland Non-Motorized Transportation Committee, Midland Chamber of Commerce, Midland Downtown Development Authority, Midland Tomorrow, and Midland Area Community Foundation.

In addition to the committee meetings noted above, a Public Information Meeting was held on December 14, 2016 to solicit public input regarding the project. The purpose of the meeting was to present the purpose and need of the proposed project, the Preferred Alternative, alternatives that were considered as part of the study, and solicit input from all attendees. The public was informed about methods for providing input, and questions from attendees were answered. Approximately 20 members of the public attended the meeting, with 11 citizens providing written comments. Of the comments provided, seven were in support of the Preferred Alternative. No opposition to the Preferred Alternative was presented. Exhibits and comments from the meeting are included in Appendix H.

1.5 Downtown Midland Streetscape Redevelopment Study

The City of Midland is currently conducting a separate study to identify potential streetscape and non-motorized improvements in their downtown and along other streets that provide access to downtown. This study is referred to as the “Downtown Midland Streetscape Redevelopment Study”. As part of this streetscape study, the City has been evaluating how to improve transportation connectivity between US-10 BR and Main Street. Preliminary recommendations from the streetscape study include

Converting Rodd Street and Ashman Street to two-way roadways (they are both currently one-way streets) from US-10 BR (Indian Street) south to Main Street. Additionally, McDonald Street has been recommended to include an on-street bicycle facility, making it the main bicycle route connection between downtown and US-10 BR. These recommendations have not received formal approval by the City. Some stakeholders have suggested the City should investigate alternative schemes for non-motorized connections between Main Street and US-10 BR. The City of Midland will be further evaluating this topic before an approved plan is advanced. Regardless, the Preferred Alternative for the US-10 BR corridor will be able to accommodate any improvements which are eventually identified from the City of Midland streetscape project.

2.0 CAPACITY ANALYSIS METHODOLOGY

The Synchro (Version 9) and SimTraffic software programs from Trafficware, which are the most recent version of these softwares, were used for the analysis of operations at each of the study intersections and roadway segments. Synchro is a macroscopic traffic analysis and optimization software tool that supports the *Highway Capacity Manual's* (HCM) methodology for intersection analysis (discussed below). This software tool was chosen for this study as it is widely used in the traffic engineering industry, and is also utilized by MDOT. SimTraffic, a microsimulation program packaged with SYNCHRO, was also utilized to evaluate queuing and blocking issues.

MDOT's existing Synchro model was provided to DLZ by MDOT. This model was used as the starting point for the capacity analysis. The model was updated to reflect the current roadway geometry, intersection traffic control, signal timings, and traffic volumes. Poseyville Road, Cronkright Street, and George Street were added to the model to encompass the entire study area for the purposes of this study.

Roadway segments on US-10 BR were evaluated using Arterial Level-of-Service (LOS). This Measure of Effectiveness (MOE) considers the delay at intersections and the speed on roadway links and gives an assessment of the overall corridor operations in terms of average running speed. Arterial LOS was calculated using the through movement delays at the intersections and the average running time between intersections based on the posted speed limits on US-10 BR. This analysis does not consider the effects of mid block traffic movements (i.e., driveways, minor roadways, medians, turn lanes).

The determination of acceptable traffic operation at an intersection is based on the HCM Level of Service (LOS) calculated based using the methods of the Transportation Research Board *Highway Capacity Manual*, 2010 Edition. The HCM details methodologies for assessing the operational characteristics of various aspects of public roads and non-motorized facilities. These methodologies have been developed over 60 years based on empirical analyses and studies. HCM methodologies were utilized for this project and are based on travel delay experienced by users, which is then converted to LOS. The Federal Highway Administration (FHWA) also requires the use of HCM for projects that could involve Federal funding.

LOS is a qualitative measure that describes the quality of operating conditions within the traffic stream and the perception of motorists. The LOS of an intersection is based on the total delay experienced by vehicles waiting to travel through an intersection. The LOS is defined in terms of this total delay, as measured by the average number of seconds of delay per vehicle. Vehicle delay is a means of measuring factors such as driver comfort and convenience, safety, maneuverability, fuel consumption, and lost travel time. The LOS is based on a scale of "A" to "F", with "A" being the best situation. LOS "A" describes traffic operations with very low delay (i.e., most vehicles stop only the minimum amount necessary before entering the intersection). LOS "F" indicates very high delays with long queues of vehicles. In this case, the volume often exceeds the capacity of the intersection. Traffic is interrupted and impeded to the point that it can become "gridlocked" and the capacity of the road system is greatly diminished.

The Synchro model was used to calculate LOS for this study according to the methods of the HCM. The capacity analyses were completed for five different scenarios: Existing Conditions, Year 2040 No Build

ffic, Alternative 1/1A, Alternative 2, and Alternative 3. The AM Peak and PM Peak hours were evaluated for all scenarios. An intersection operating at LOS D is typically considered to have an acceptable operation. The alternatives under consideration are described below in Section 5.0 Road Improvement Alternatives.

Table 1 summarizes the specific LOS criteria for signalized and unsignalized intersections as well as arterial segments.

Table 1. Level of Service Definitions

Level of Service	Signalized Intersections	Unsignalized Intersections	Arterial Segment
	Average Control Delay (Seconds/Vehicle)		Average Travel Speed as a Percentage of Base Free Flow Speed (percent)
A	≤10	≤ 10	> 85
B	> 10 and ≤ 20	> 10 and ≤ 15	> 67 and < 85
C	> 20 and ≤ 35	> 15 and ≤ 25	> 50 and < 67
D	> 35 and ≤ 55	> 25 and ≤ 35	> 40 and < 50
E	> 55 and ≤ 80	> 35 and ≤ 50	> 30 and < 40
F	> 80	> 50	≤ 30

Source: Transportation Research Board, *Highway Capacity Manual*, 2010

3.0 EXISTING CONDITIONS

Intersection turning movement counts were collected by MDOT at 26 intersections within the project area during the AM and PM peak hours. The counts were provided via the 2013 MDOT Synchro model for the US-10 BR corridor. The following intersections were included in the corridor study:

Segment 1

1. Washington Street/WB US-10 BR
2. Washington Street/EB US-10 BR
3. Bayliss Street/WB US-10 BR
4. Bayliss Street/EB US-10 BR
5. Jefferson Avenue/WB US-10 BR
6. Jefferson Avenue/EB US-10 BR
7. George Street/WB US-10 BR
8. George Street/EB US-10 BR
9. South Poseyville Road/ Ellsworth Street/Cronkright Street
10. South Poseyville Road/ Ellsworth Street/George Street
11. Cronkright Street/WB US-10 BR
12. Cronkright Street/EB US-10 BR
13. Rodd Street/WB US-10 BR
14. Rodd Street/EB US-10 BR
15. Ashman Street/WB US-10 BR
16. Ashman Street/EB US-10 BR
17. Jerome Street/WB US-10 BR
18. Jerome Street/EB US-10 BR

Segment 2

19. St. Andrews Road/US-10 BR
20. Sugnet Road/US-10 BR
21. North Saginaw Road/US-10 BR
22. Dilloway Drive/US-10 BR

Segment 3

23. East Wackerly Street/US-10 BR
24. Eastbound US-10 on ramp/US-10 BR
25. Westbound US-10 on-ramp/US-10 BR
26. Airport Road/US-10 BR

3.1 Capacity Analysis

As described above, the existing MDOT Synchro model was used as the basis for the existing conditions model which included the existing AM and PM peak hour turning movement counts, intersection geometry, and signal timings. Using the 2010 HCM methodology, the existing LOS was determined for the study intersections. Under the existing conditions, the signalized intersections within the study area operate at an overall LOS D or better during the AM and PM peak hours, as shown in Table 2. Despite operating at an acceptable overall LOS, the following movements operate at a failing LOS (LOS E or F) (See Appendix A for Synchro output reports):

- US-10 BR (Eastman Avenue) at North Saginaw Road
  - EBL*, PM – F/101.9 seconds of delay
  - NBL, PM – E/64.6 seconds of delay
  - SBT, PM – F/81.5 seconds of delay
- US-10 BR (Eastman Avenue) at East Wackerly Street
  - EBL, PM – F/96.1 seconds of delay
  - WBT, PM – F/83.2 seconds of delay
- US-10 BR (Eastman Avenue) at Airport Road
  - EBL, PM – E/57.3 seconds of delay
  - WBR, PM – F/92.7 seconds of delay

*NB – Northbound, SB – Southbound, EB – Eastbound, WB – Westbound, L – Left Turn, T – Through Movement, R – Right Turn

Additionally, the unsignalized intersection of Cronkright Street and US-10 BR (Indian Street) operates at failing LOS F with 55.9 seconds of delay per vehicle during the PM peak hour.

The arterial LOS for the segments along US-10 BR under the existing conditions is shown in Table 3. As shown in this table, all segments operate at LOS C or better except for the Segment 3 southbound movement during the AM and PM peak hour, which operates at LOS E/17.2 mph and LOS E/16.7 mph, respectively. Table 4 presents the arterial travel time for the existing conditions for each corridor segment. The arterial travel time shows the time it takes for motorist to travel each segment of the corridor by direction. (See Appendix A for Synchro output reports).

Table 2. US-10 BR Intersection LOS Summary for Alternatives

Intersection	Existing Conditions		No Build 2040		Alternative 1 - Lane Reduction		Alternative 1a - Lane Reduction with Bi-Directional Traffic along Ashman and Rodd		Alternative 2 - US-10BR 5-Lane Cross Section		Alternative 3 - US-10BR 5-Lane Cross Section, Local 3-Lane Cross Section	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Segment 1												
Washington Street/WB US-10 BR Patrick Road	B/14.0 s	B/15.9 s	B/12.3 s	B/13.2 s	B/13.5 s	B/12.9 s	B/13.5 s	B/13.0 s	B/11.4 s	B/13.7 s	D/35.9 s	B/16.2 s
Washington Street/EB US-10 BR Lyon Road	A/5.7 s	A/8.3 s	A/8.6 s	B/12.3 s	A/9.0 s	B/11.1 s	A/9.3 s	B/11.0 s	C/20.9 s	C/29.4 s	C/21.0 s	C/33.9 s
Bayliss Street/WB US-10 BR Patrick Road	B/13.0 s*	C/18.3 s*	B/13.9 s*	C/21.5 s*	D/28.2 s*	C/20.8 s*	D/28.2 s*	C/20.8 s*	A/5.5 s	B/11.6 s	A/5.2 s	A/6.9 s
Bayliss Street/EB US-10 BR Lyon Road	A/6.1 s	A/8.5 s	A/7.0 s	A/9.3 s	A/8.1 s	A/9.0 s	A/8.0 s	A/9.2 s	B/11.2 s	A/9.2 s	B/11.1 s	B/16.3 s
Jefferson Avenue/WB US-10 BR Patrick Road	A/8.8 s	A/7.6 s	A/9.4 s	A/8.8 s	A/8.9 s	A/7.5 s	A/9.0 s	A/7.6 s	A/7.4 s	A/8.7 s	A/7.9 s	A/8.6 s
Jefferson Avenue/EB US-10 BR Lyon Road	A/8.6 s	A/6.2 s	A/4.6 s	A/7.4 s	A/5.5 s	A/7.8 s	A/5.6 s	A/7.7 s	A/7.3 s	B/10.8 s	A/7.9 s	B/10.8 s
George Street/WB US-10 BR Indian Street	A/10.0 s	B/11.9 s	B/7.5 s	A/6.1 s	A/3.9 s	A/6.6 s	A/3.7 s	A/6.4 s	A/3.6 s	A/3.3 s	A/2.7 s	A/2.6 s
George Street/EB US-10 BR Buttles Street	B/14.0 s	A/4.9 s	B/10.9 s	B/11.0 s	A/9.8 s	A/8.0 s	A/9.6 s	A/8.0 s	B/13.5 s	B/10.0 s	B/15.5 s	B/14.9 s
South Poseyville Road/Ellsworth Street/George Street	B/11.3 s	B/11.7 s	A/3.9 s	A/9.6 s	A/5.2 s	A/9.6 s	A/5.2 s	A/9.7 s	A/5. 1 s	A/9.4 s	A/5.1 s	A/9.1 s
South Poseyville Road/Ellsworth Street/Cronkright Street	B/12.8 s	B/16.1 s	A/3.1 s	B/11.2 s	A/3.7 s	B/13.5 s	A/3.7 s	B/13.1 s	A/8.1 s	A/8.9 s	A/6.1 s	A/6.2 s
Cronkright Street/WB US-10 BR Indian Street	C/17.6 s*	F/56.4 s	C/21.0 s*	F/123.2 s*	C/16.6 s*	D/33.2 s*	C/16.6 s*	D/33.2 s*	B/11.4 s	B/15.4 s	B/12.3 s	B/15.4 s
Cronkright Street/EB US-10 BR Buttles Street	A/4.0 s	A/7.8 s	A/6.3 s	B/10.1 s	A/5.5 s	A/8.3 s	A/5.6 s	A/8.6 s	A/4.7 s	B/10.8 s	A/8.9 s	B/17.2 s
Rodd Street/WB US-10 BR Indian Street	A/6.6 s	A/7.1 s	A/5.6 s	A/6.1 s	A/7.1 s	A/8.2 s	B/12.1 s	B/13.7 s	A/5.5 s	A/4.4 s	A/1.8 s	A/2.9 s
Rodd Street/EB US-10 BR Buttles Street	A/1.7 s	A/5.2 s	A/3.4 s	A/5.6 s	A/2.1 s	A/4.8 s	A/5.6 s	A/7.2 s	A/3.1 s	A/5.9 s	A/3.5 s	A/7.9 s
Ashman Street/WB US-10 BR Indian Street	A/5.6 s	A/6.5 s	A/8.9 s	B/11.7 s	A/8.0 s	B/10.4 s	A/8.2 s	A/9.4 s	A/9.1 s	B/11.0 s	A/6.9 s	A/8.6 s
Ashman Street/EB US-10 BR Buttles Street	A/8.2 s	A/8.5 s	A/6.2 s	A/4.3 s	A/7.4 s	A/6.5 s	A/6.9 s	A/7.8 s	A/4.2 s	A/4.6 s	A/7.8 s	A/8.6 s
Jerome Street/WB US-10 BR Indian Street	B/11.6 s	B/12.5 s	B/12.9 s	B/13.5 s	B/10.1 s	B/10.9 s	A/9.9 s	B/10.0 s	B/11.7 s	C/20.6 s	B/17.0 s	C/26.3 s
Jerome Street/EB US-10 BR Buttles Street	A/8.3 s	A/9.7 s	A/12.8 s	B/13.5 s	B/15.3 s	B/16.0 s	B/14.8 s	B/15.7 s	C/23.0 s	C/29.8 s	B/17.1 s	C/27.5 s
US 10-BR Eastman Ave/EB US-10 BR/WB US-10 BR Indian Street	-	-	-	-	-	-	-	-	A/6.8 s	A/8.8 s	A/2.3 s	A/4.2 s
Segment 2												
US 10-BR Eastman Ave/St. Andrews Road	A/4.6 s	B/10.5 s	A/5.3 s	A/7.3 s	A/4.2 s	A/6.5 s	A/4.1 s	A/6.5 s	A/5.3 s	B/11.3 s	A/5.3 s	B/11.3 s
US 10-BR Eastman Ave/Sugnet Road	A/9.2 s	B/11.4 s	B/8.3 s	B/13.4 s	A/8.2 s	A/6.9 s	A/8.3 s	A/6.9 s	A/8.4 s	B/12.3 s	A/8.4 s	B/12.3 s
US 10-BR Eastman Ave/Saginaw Road	C/25.8 s	D/44.0 s	C/25.9 s	D/51.2 s	B/19.5 s	D/43.2 s	B/19.5 s	D/43.2 s	C/30.1 s	D/51.6 s	C/30.1 s	D/51.6 s
US 10-BR Eastman Ave/Dilloway Drive	A/8.6 s	A/7.6 s	A/7.6 s	A/5.3 s	A/7.7 s	A/5.9 s	A/7.7 s	A/5.9 s	A/9.3 s	A/8.9 s	A/9.3 s	A/8.9 s
Segment 3												
US 10-BR Eastman Ave/Wackerly Street	C/29.4 s	D/42.4 s	C/27.2 s	D/52.6 s	B/19.7 s	B/19.1 s	B/19.7 s	B/19.1 s	C/28.3 s	C/27.1 s	C/28.3 s	C/27.1 s
US 10-BR Eastman Ave/Airport Road	C/20.9 s	C/30.7 s	B/15.4 s	D/24.7 s	B/13.6 s	B/17.3 s	B/13.6 s	B/17.3 s	B/19.0 s	C/23.3 s	B/19.0 s	C/23.3 s

*Intersection is unsignalized, LOS & delay listed is for worst performing controlled approach

**Under Alternatives 2 & 3, US-10 BR would have bi-directional traffic and would no longer be designated as eastbound/westbound

Table 3. US-10 BR Road Arterial LOS Summary for Alternatives

SEGMENT	Direction	Existing Conditions		No Build 2040		Alternative 1 - Lane Reduction		Alternative 1A - Lane Reduction with Bi-Directional Traffic along Ashman and Rodd		Alternative 2 - US-10BR 5-Lane Cross Section		Alternative 3 - US-10BR 5-Lane Cross Section, Local 3-Lane Cross Section	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Segment 1- Washington Street to W. Hines Street (Patrick Road)	Eastbound	-	-	-	-	-	-	-	-	B/34.1 mph	B/32.6 mph	C/23.7 mph	C/27.7 mph
	Westbound	B/35.3 mph	B/34.5 mph	A/38.2 mph	A/38.1 mph	A/37.7 mph	A/30.2 mph	A/33.6 mph	A/29.6 mph	B/26.2 mph	C/21.7 mph	C/22.6 mph	B/23.9 mph
Segment 1- Washington Street to W. Hines Street (Indian Street)	Eastbound	-	-	-	-	-	-	-	-	C/20.7 mph	C/20.8 mph	C/22.5 mph	C/17.8 mph
	Westbound	B/27.3 mph	B/25.4 mph	B/27.8 mph	B/25.8 mph	C/27.1 mph	C/24.4 mph	C/26.3 mph	C/23.5 mph	B/26.2 mph	C/21.7 mph	C/22.6 mph	B/23.9 mph
Segment 1- Washington Street to W. Hines Street (Lyon Road)	Eastbound	B/36.9 mph	A/38.7 mph	A/38.5 mph	A/39.1 mph	B/36.8 mph	B/37.3 mph	B/36.9 mph	B/37.5 mph	B/34.8 mph	B/32.1 mph	B/34.8 mph	B/34.1 mph
	Westbound	-	-	-	-	-	-	-	-	B/33.3 mph	C/29.7 mph	B/31.3 mph	C/28.2 mph
Segment 1- Washington Street to W. Hines Street (Buttles Street)	Eastbound	B/26.3 mph	B/24.7 mph	B/26.0 mph	C/23.4 mph	B/25.5 mph	B/24.2 mph	B/25.7 mph	B/24.3 mph	C/21.3 mph	C/20.2 mph	C/20.7 mph	D/15.9 mph
	Westbound	-	-	-	-	-	-	-	-	B/24.8 mph	B/24.3 mph	B/23.9 mph	C/22.4 mph
Segment 2- W. Hines Street to E. Wackerly Street	Northbound	B/37.1 mph	B/35.0 mph	B/35.5 mph	C/26.5 mph	B/36.2 mph	B/32.7 mph	B/35.9 mph	B/32.2 mph	B/35.7 mph	B/32.4 mph	B/35.7 mph	B/32.4 mph
	Southbound	B/36.3 mph	B/33.9 mph	B/36.8 mph	B/31.6 mph	B/36.5 mph	B/32.9 mph	B/36.5 mph	B/33.0 mph	B/36.3 mph	B/33.2 mph	B/36.3 mph	B/33.2 mph
Segment 3-E. Wackerly Street to Airport Road (US-10/US-10BR Interchange Area)	Northbound	C/25.0 mph	C/23.0 mph	C/27.2 mph	C/26.8 mph	B/31.7 mph	C/28.7 mph	B/32.2 mph	C/28.3 mph	B/31.7 mph	C/28.7 mph	B/31.7 mph	C/28.7 mph
	Southbound	E/17.2 mph	E/15.3 mph	D/20.8 mph	E/15.1 mph	D/20.7 mph	D/20.3 mph	D/20.9 mph	D/20.4 mph	D/20.7 mph	D/20.3 mph	D/20.7 mph	D/20.3 mph

Values in red text indicate segment is operating at a unacceptable Level of Service (LOS E or F)

Table 4. US-10 BR Road Arterial Travel Time for Alternatives

SEGMENT	Direction	Existing Conditions		No Build 2040		Alternative 1 - Lane Reduction		Alternative 1A - Lane Reduction with Bi-Directional Traffic along Ashman and Rodd		Alternative 2 - US-10BR 5-Lane Cross Section		Alternative 3 - US-10BR 5-Lane Cross Section, Local 3-Lane Cross Section	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Segment 1- Washington Street to W. Hines Street (Patrick Road/Indian Street)	Eastbound	-	-	-	-	-	-	-	-	4.2 min	4.3 min	5.2 min	5.1 min
	Westbound	3.6 min	3.8 min	3.4 min	4.0 min	3.5 min	4.2 min	3.8 min	4.3 min	3.9 min	4.4 min	4.0 min	3.9 min
Segment 1- Washington Street to W. Hines Street (Lyon Road/Buttles Street)	Eastbound	3.9 min	3.9 min	3.8 min	4.2 min	4.0 min	4.0 min	3.9 min	4.0 min	4.1 min	4.4 min	4.2 min	4.7 min
	Westbound	-	-	-	-	-	-	-	-	4.0 min	4.3 min	4.2 min	4.6 min
Segment 2- W. Hines Street to E. Wackerly Street	Northbound	3.4 min	3.6 min	3.6 min	4.8 min	3.5 min	3.9 min	3.5 min	3.9 min	3.5 min	3.9 min	3.5 min	3.9 min
	Southbound	3.9 min	4.1 min	3.8 min	4.4 min	3.8 min	4.2 min	3.8 min	4.2 min	3.8 min	4.2 min	3.8 min	4.2 min
Segment 3-E. Wackerly Street to Airport Road (US-10/US-10BR Interchange Area)	Northbound	1.7 min	1.8 min	1.5 min	1.8 min	1.3 min	1.5 min	1.3 min	1.5 min	1.3 min	1.5 min	1.3 min	1.5 min
	Southbound	1.4 min	1.6 min	1.2 min	1.6 min	1.2 min	1.2 min	1.1 min	1.2 min	1.2 min	1.2 min	1.2 min	1.2 min

3.2 Non-Motorized Facilities

The US-10 BR corridor was originally designed with a focus on traffic flow and safety, which has historically been a common design approach for state trunkline highways. The one-way street system (Segment 1) was designed to provide high level traffic operations. In addition, one-way streets were viewed as safer and better for rapid movement of traffic for peak shift times for local industries and in case of an emergency.

Over the years, traffic patterns in Midland have changed. Traffic growth is relatively low and is generally stable along US-10 BR. In addition, there has been an increased focus on pedestrian and bike travel, both in the city's policy/plans and from MDOT. Past improvements within part of the US-10 BR right-of-way were made to improve travel for non-motorized users. One example is the median shared use path and landscaping between Washington Street and State Street. Others include the ADA improvements for the sidewalks at some of the intersections.

Existing conditions for non-motorized facilities along the corridor are varying. There is a long stretch of the right-of-way that has a convenient 10' shared use path meandering within the median. This path is well used and connects to the Dow Diamond and to the Pier Marquette Riverfront Trail, but it is not a linear path that is convenient for and efficient travel purposes. It also does not serve the entirety of the corridor.

There is sidewalk along the majority of the corridor running parallel with the street, separated by a grassy curb lawn. Some segments are in varying stages of disrepair and are not up to current width standards, especially in the in the area between Jerome and Cronkright. While some of the intersections have been upgraded with modern ADA compliant curb ramps/crossings, others have not yet been upgraded.

Outside of the median shared pathway along the eastern segment of US-10 BR, there are currently no on-street bicycle facilities, though "sharrows" are used entering the downtown crossing US-10 BR on Ashman and Rodd Streets.

3.3 Crash Analysis

Crash data was analyzed based on existing conditions utilizing five years of crash data (2010-2014) within the study area. Crash data was provided by MDOT. The crash analysis showed a total of 1,231 crashes within the study area over the five-year period. See Table 5 for a summary of all corridor crashes. Of these crashes, there were two fatalities, 316 injury crashes (seven incapacitating injuries (Type-A)), four crashes involving pedestrians, five crashes involving bicyclists, and 1,007 property damage only (PDO) crashes. Twenty-two crashes were alcohol related. None of the alcohol related crashes resulted in fatal or incapacitating injuries. As shown in Tables 5 and 6, rear-end crashes are the highest occurring crash type throughout the corridor, comprising 36 percent of the total crashes. The second highest crash type is angle crashes, comprising 27 percent of the total crashes. The third highest crash type is side-swipe at 19 percent of the total crashes. These crashes predominately occurred within the vicinity of the signalized intersections.

There were two fatal crashes within the US-10 BR corridor. One crash involved a pedestrian along US-10 BR between Wackerly Road and Harcrest Drive. The other was a multi-vehicle crash that was caused by an uncontrolled vehicle crossing the center line and impacting another vehicle and a single unit truck. The crash analysis showed seven Type-A (incapacitating injury) crashes. One crash at US-10 BR and Carpenter Street involved a pedestrian crossing US-10 BR. The other five crashes were caused by driver error and disobeying traffic controls.

Of the 1,231 crashes within the study area, 689 crashes occurred at the intersections. An intersection crash was defined as being with 150 feet of an intersection. The crash data shows rear-end (21 percent) and angle crashes (18 percent) were the highest occurring types of crashes at the intersections. The highest number of crashes occurred at the intersections of Saginaw Road (104 crashes), Ashman Street (82 crashes), Wackerly Street (76 crashes), Jerome street (64 crashes), and Washington Avenue (63 crashes) at US-10 BR.

Of the 1,231 crashes within the study area, 542 crashes occurred within the roadway segments. The segment crash data shows that rear-end (16 percent) and angle crashes (10 percent) are the highest occurring crash types within the project area road segments. The majority of the crashes occurred within the segments of Dilloway Drive to Wackerly Street, Jefferson Avenue to George Street, Jerome Street to Saint Andrews Road, and Saginaw Road to Dilloway Drive.

Table 5: US-10 BR Corridor Crash Summary – Overall

Intersection	Angle Straight	Rear End Straight	Side Swipe Same	Angle Turn	Rear End Drive	Angle Drive	Rear End Left	Rear End Right	Side Swipe Opposite	Backing	Fixed Object	Misc. Single Vehicle	Misc. Multi Vehicle	Head On	Parking	Head On Left	Animal	Pedestrian	Bike	Dual Left	Other Drive	Other Object	Over Turning	Dual Left	Total
Ashman at US10BR	25	10	34	4	0	2	1	0	0	0	1	0	2	0	0	0	0	1	0	1	0	0	0	1	**82**
Bayliss at US10BR	14	3	8	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
Cronkright at US10BR	14	3	2	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**23**
Dilloway at US10BR	8	15	5	0	1	0	0	0	0	0	0	0	2	0	0	1	1	0	0	1	1	0	0	0	**35**
EB US 10 EB at US10BR	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
George at US10BR	24	5	6	5	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	**44**
Jefferson at US10BR	2	5	2	0	0	0	0	0	0	0	11	0	1	0	0	0	0	0	0	0	0	0	0	0	**21**
Jerome at US10BR	8	15	20	5	1	0	0	1	0	2	1	0	2	0	0	0	0	0	1	2	0	1	0	5	**64**
Rodd at US10BR	15	2	5	2	0	0	0	1	1	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	**30**
Saginaw at US10BR	8	42	7	15	3	5	1	1	2	1	1	0	3	1	0	12	0	0	0	0	1	0	0	1	**104**
St. Andrews at US10BR	3	10	4	2	1	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	**23**
Sugnet at US10BR	4	10	3	2	1	1	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	**25**
Wackerly at US10BR	3	39	6	4	4	7	0	4	2	2	1	0	0	0	1	3	0	0	0	0	0	0	0	0	**76**
Wackerly/EB US 10 at US10BR	0	14	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	**18**
Washington at US10BR	19	16	22	1	0	0	0	0	0	0	3	0	1	0	0	0	0	1	0	0	0	0	0	0	**63**
WB loop ramp at US10BR	2	29	8	2	2	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	**46**
TOTAL	**149**	**220**	**135**	**43**	**15**	**16**	**7**	**8**	**5**	**6**	**27**	**0**	**15**	**1**	**2**	**18**	**3**	**3**	**1**	**4**	**2**	**2**	**0**	**7**	**689**
Segment	**Angle Straight**	**Rear End Straight**	**Side Swipe Same**	**Angle Turn**	**Rear End Drive**	**Angle Drive**	**Rear End Left**	**Rear End Right**	**Side Swipe Opposite**	**Backing**	**Fixed Object**	**Misc. Single Vehicle**	**Misc. Multi Vehicle**	**Head On**	**Parking**	**Head On Left**	**Animal**	**Pedestrian**	**Bike**	**Dual Left**	**Other Drive**	**Other Object**	**Over Turning**	**Dual Left**	**Total**
Ashman to Jerome	0	7	14	0	1	1	1	0	0	1	0	0	2	0	0	0	0	0	1	0	0	0	0	0	**28**
Bayliss to Jefferson	4	6	2	0	0	1	0	0	0	1	13	1	1	0	0	0	0	0	0	0	0	0	1	0	**30**
Crockright to Rodd	3	2	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	**10**
Dilloway to Wackerly	2	66	3	2	2	5	0	0	0	2	4	0	1	0	1	2	1	0	0	0	1	1	0	0	**93**
EB ramp to WB loop ramp	2	8	1	0	0	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	**17**
Jefferson to George	29	6	16	2	0	0	2	1	0	0	34	0	4	0	0	0	3	1	1	0	0	1	1	0	**101**
Jerome to St. Andrews	0	23	14	5	1	0	2	1	2	1	13	0	3	1	0	3	0	0	1	0	0	0	1	0	**71**
Rodd to Ashman	7	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
Saginaw to Dilloway	9	24	16	9	9	31	0	1	0	0	7	0	0	1	1	0	1	0	1	0	6	2	0	0	**118**
St. Andrews to Sugnet	0	6	3	0	2	1	0	1	1	0	3	0	1	0	0	0	3	0	0	0	0	1	0	0	**22**
Sugnet to Saginaw	0	17	4	0	0	6	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
Washington to Bayliss	0	3	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
TOTAL	**56**	**168**	**84**	**20**	**15**	**47**	**7**	**4**	**5**	**5**	**78**	**1**	**13**	**2**	**2**	**5**	**9**	**1**	**4**	**0**	**7**	**6**	**3**	**0**	**542**

e 6. US-10 BR Corridor Crash Summary – By Year

CRASH TYPE	NUMBER OF CRASHES					MONTHLY AVERAGE	PERCENTAGE
	2010	2011	2012	2013	2014		
Minor Injuries	59	78	57	67	45	5.1	24.90%
Serious Injury/Fatalities	3	1	6	1	1	0.2	1.00%
Angle Drive	15	14	12	11	11	1.05	5.10%
Angle-Straight	35	39	41	54	36	3.42	16.70%
Angle -Turn	18	16	12	12	5	1.05	5.10%
Animal	7	0	0	2	3	0.2	1.00%
Pedestrian	1	1	1	1	0	0.07	0.30%
Bicycle	2	1	1	0	1	0.08	0.40%
Fixed Object	17	21	19	28	20	1.75	8.50%
Other Object	1	3	1	2	1	0.13	0.60%
Head-On	1	1	0	0	1	0.05	0.20%
Head-On Left Turn	8	4	9	0	2	0.38	1.90%
Rear-End Left Turn	1	7	2	4	0	0.23	1.10%
Rear-End Straight	81	77	87	84	59	6.47	31.50%
Rear End Drive	9	2	4	6	9	0.5	2.40%
Rear-End Right Turn	2	4	2	2	2	0.2	1.00%
Side Swipe Same	43	34	50	50	42	3.65	17.80%
Side Swipe Opp. Dir.	3	2	2	1	2	0.17	0.80%
Backing	1	3	1	4	2	0.18	0.90%
Parking	1	0	2	1	0	0.07	0.30%
Overturned	1	0	1	0	1	0.05	0.20%
Other Drive	1	0	5	2	1	0.15	0.70%
Dual Left Turn	0	1	1	4	1	0.12	0.60%
Dual Right Turn	1	0	2	0	1	0.07	0.30%
Misc. Multi/Single Vehicle	1	10	1	6	11	0.48	2.4%
TOTAL	**250**	**240**	**256**	**274**	**211**		

4.0 FUTURE NO-BUILD CONDITIONS (YEAR 2040)

The "No Build" scenario assumes that normal traffic growth occurs between 2015 and the year 2040, with no capacity modifications to the existing roadway network except for projects that are already identified/planned and likely to be built (note: it was assumed that for the "No Build" scenarios, normal ongoing capital maintenance and road resurfacing/reconstruction projects would still occur consistent with MDOT and the City's capital improvement plan). Reviewing expected traffic operations of the existing network in the year 2040 based on anticipated traffic growth allows identification of potential future infrastructure needs that would not be apparent when only looking at existing traffic volumes. It is anticipated that signal operation modernization and optimization will occur by year 2040, and this is assumed for the No Build scenario.

In order to evaluate the operation of the study intersections and roadway segments for the future conditions (year 2040 No Build), the Synchro model was updated to reflect conditions anticipated to exist in the year 2040. A future traffic volume forecast for the year 2040 No-Build scenario was developed through applying a compound annual growth factor to the existing traffic volumes. In order to develop future growth rates for the project corridor, historic ADT counts, peak hour turning movement counts, local land use and zoning plans, local transportation plans, and information from the existing MDOT travel models for the area were reviewed and evaluated. Upon this review, future growth rates were developed. The growth rate used to develop future (year 2040) traffic volumes was 0.5 percent per year. Therefore, to develop "base" 2040 No Build traffic volumes, the existing traffic volumes were increased by this 0.5 percent per year growth rate for 25 years (2015 to 2040).

4.1 Capacity Analysis

Under the year 2040 No Build conditions, the majority of the study area signalized intersections would operate at an overall LOS D or better during the AM and PM peak hours, as shown in Table 2. Despite operating at an acceptable overall LOS, the following movements would operate at a failing LOS (LOS E or F) (See Appendix B for Synchro outputs):

- US-10 BR (Eastman Avenue) at Saginaw Road
  - EBL, PM – F/73.4 seconds of delay
  - WBT, PM – E/67.7 seconds of delay
  - NBL, PM – F/72.8 seconds of delay
  - SBL, PM – F/68.9 seconds of delay
  - SBT, PM – E/60.0 seconds of delay
- US-10 BR (Eastman Avenue) at East Wackerly Street
  - EBL, PM – F/81.4 seconds of delay
  - WBT, PM – F/101.8 seconds of delay
  - NBT, PM – E/69.7 seconds of delay
  - SBL, PM – E/62.5 seconds of delay

Additionally, the unsignalized intersection of Cronkright Street and US-10 BR (Indian Street) would operate at failing LOS F with 123.2 seconds of delay per vehicle during the PM peak hours.

The arterial LOS for the segments along US-10 BR under the No Build conditions is shown in Table 3. As shown in Table 3, all segments would operate at LOS D or better except for the Segment 3 southbound movement during the PM peak hour, which would operate at LOS E/15.1 mph. Under the 2040 No Build conditions, Table 4 shows an increase in arterial travel time along US-10 BR compared to the existing

ditions. The most significant increase is northbound along Segment 2 which has an increase of 1.2 minutes. This increase is consistent with the delays experienced at North Saginaw Road and East Wackerly Street (See Appendix B for Synchro outputs).

5.0 TRANSPORTATION IMPROVEMENT ALTERNATIVES

This section describes the transportation improvement alternatives that were considered for the US-10 BR corridor study, as well as the process used to develop and evaluate these alternatives. Three potential alternatives were developed through a series of Steering and Stakeholder committee meetings. Early preliminary engineering (EPE) was performed to identify proposed transportation improvements. As part of the EPE process, a traffic analysis was conducted for each alternative. Input and guidance was also received from the Steering and Stakeholder committees. The alternatives were then evaluated based on a variety of criteria as shown in Table 7. The alternatives were analyzed with the horizon year (2040) traffic volumes. The No Build Alternative serves as the baseline against which the other alternatives are compared.

The following describes the proposed transportation improvements, traffic analysis, benefits, and impacts for each alternative.

5.1 Alternative 1

5.1.1 Transportation Improvements

Under this alternative, the existing one-way pair in Segment 1 would be reduced from three to two travel lanes in each direction. Additionally, all signalized intersections would be upgraded and retimed. See Figure 2 for the proposed transportation improvements under Alternative 1. This reduction would result in two westbound/northbound through lanes and two southbound/eastbound through lanes. The lane reduction would reduce the existing three 13-foot travel lanes in each direction to two 12-foot travel lanes in each direction. This reduction could allow for the inclusion of other transportation facilities within the right-of-way. These facilities could include on-street bicycle lanes or cycle tracks with a buffer separating bicyclists from motor vehicular traffic, or multi-use paths.

On-street parking would not be a viable option due the speed limit on Indian Street and the impacts to traffic operations resulting from on-street parking delays.

The proposed improvements for Segment 2 would include signal upgrades, retiming, and the following lane additions:

- North Saginaw Road/US-10 BR (Eastman Avenue) Intersection
  - Install a Southbound Right Turn Lane
  - Install a Northbound Right Turn Lane

For all other intersection and roadway segments and non-motorized facilities, the cross section would remain the same as the existing configurations.

The proposed roadway improvements for Segment 3 would include signal upgrades, retiming, and the following lane additions:

- Airport Road/US-10 BR (Eastman Avenue) Intersection
  - Install a Southbound Right Turn Lane
  - Install a Southbound Through Lane
  - Install an Eastbound Left Turn Lane

- East Wackerly Street/US-10 BR (Eastman Avenue) Intersection
  - Install a Northbound Through Lane
  - Install a Westbound Right Turn Lane

For all other intersection and roadway segments, the cross section would remain the same as the existing configurations.

These improvements described within Segment 3 are consistent with the previous roadway and signal improvement plans prepared by the City in 2008. These plans were previously reviewed and approved by MDOT.

5.1.2 Capacity Analysis

Table 2 shows that under Alternative 1 the lane reduction would provide similar operations at the intersections when compared to the No Build conditions (i.e., three travel lanes in each direction) (See Appendix C for Synchro output reports). Alternative 1 would provide acceptable LOS at all of the intersections except Cronkright Street. At this intersection, southbound Cronkright Street is predicted to operate at LOS F with 71.9 seconds of delay per vehicle. However, this approach is stop-controlled, and southbound drivers would most likely find alternate routes (due to the delay) as there are numerous other routes available. It was estimated that 50 percent of the traffic along Cronkright Street could theoretically divert to George Street and Ashman Street, as a result, LOS and delays at the intersection would improve to LOS C with 16.6 seconds of delay per vehicles (see Table 2). At this intersection, westbound US-10 BR is free flowing and would operate at LOS A.

The US-10 BR (Indian Street) approach at the Jerome Street intersection would still need to be a three-lane cross section with one left turn lane, one thru/left-turn lane, and one thru lane. Furthermore, the US-10 BR (Buttles Street) approach at the Jerome Street intersection would still need to be a three-lane cross section with one right turn lane, one thru/left-turn lane, and one thru lane.

The intersections within Segment 2 would operate at an overall LOS D or better, while the Segment 3 intersections would operate at an overall LOS B or better during the AM and PM peak hours, as shown in Table 2. Despite operating at an acceptable overall LOS, the following movements would operate at a failing LOS (LOS E or F) (See Appendix C for Synchro output reports):

- US-10 BR (Eastman Avenue) at Saginaw Road
  - EBL, PM – E/67.2 seconds of delay
  - SBL, PM – F/61.8 seconds of delay

To achieve optimal progression through the US-10 BR corridor, the signalized intersections along Segment 1 were modeled as fully actuated-coordinated signals operating with an 80 second cycle length during both the AM and PM peak hours. 3.5 second yellow and 2.0 all red clearance intervals were used at each of the study intersections. Similarly, pedestrian intervals of 7.0 seconds for “walk” and 13.5 seconds for “flash don’t walk” were used for each intersection approach. Under these conditions, the splits and offsets of the signalized intersections along Segment 1 were optimized to promote the optimal progression available. Progression along local side streets may need to be evaluated further if this alternative is advanced beyond this study.

The signalized intersections along Segment 2 were modeled as fully actuated-coordinated signals operating with an 80 second cycle length during the AM peak hour. During the PM peak hour, the US-10

intersections at Sugnet Road and St. Andrews Road would operate at 50 second cycle lengths, and the Saginaw Road intersection would operate with a 100 second cycle length.

The signalized intersections along Segment 3 were modeled as fully actuated-coordinated signals operating with an 80 second cycle length during the AM peak hour and 100 second cycle lengths in the PM peak hour.

In addition to the intersection analysis, the travel speeds, arterial LOS, and travel time for Alternative 1 were also evaluated and compared against the No Build conditions (i.e., three travel lanes in each direction). As shown in Table 3, within Segment 1 Alternative 1 is expected to provide an acceptable arterial LOS C or better and average speed during both peak hours. Segments 2 and 3 would operate at LOS B and D, respectively with an increase in average arterial travel speeds when compared to the No Build Conditions.

The arterial travel times (Table 4) for Segment 1 show a slight increase, while Segments 2 and 3 show a slight decrease for both northbound and southbound US-10 BR (Eastman Avenue) when compared to the No Build Conditions. This can be attributed to the intersections and signal improvements at the North Saginaw Road, East Wackerly, and Airport Road intersections, which improved overall operations and decreased congestion (See Appendix C for Synchro outputs).

5.1.3 Cost Estimate

The estimated construction cost for Alternative 1 is approximately $10,700,000, in year 2016 dollars. ROW acquisition, design, and construction engineering costs are not included. No ROW acquisition is anticipated to be needed for this alternative.

A cost estimate was developed for implementing the first stage of Alternative 1 within Segment 1 only. Stage 1 would consist of pavement marking, signing, and signal improvements only. Under this Stage 1 scenario, the estimated construction cost is approximately $390,000.

5.2 Alternative 1A

5.2.1 Transportation Improvements

The proposed improvements for Segment 1 are the same as noted above for Alternative 1. However, under this alternative, Ashman Street and Rodd Street would be converted from one-way roadways to bi-directional roadways through the study area, consistent with recommendations from the Downtown Midland Streetscape Redevelopment Study. The Ashman Street and Rodd Street intersections would be upgraded with new signal head for four-way traffic and retimed. See Figure 2 for the proposed transportation improvements under Alternative 1A.

The proposed improvements for Segments 2 and 3 are the same as noted above for Alternative 1.

5.2.2 Capacity Analysis

Under Alternative 1A, the Segment 1 intersections would operate at an overall LOS C or better, with the exception of the US-10 BR (Indian Street) and Cronkright Street intersection operating at LOS D in the PM peak hour (See Appendix D for Synchro outputs).

The Segment 2 and 3 intersections would operate at an overall LOS D or better during the AM and PM peak hours. Despite operating at an acceptable overall LOS, the following movements would operate at a failing LOS (LOS E or F) (See Appendix D for Synchro outputs):

- US-10 BR (Eastman Avenue) at Saginaw Road

- EBL, PM – E/67.2 seconds of delay
- SBL, PM – F/61.8 seconds of delay

Intersection LOS is shown in Table 2 for each Segment.

The signal timings for Alternative 1A are the same as Alternative 1.

As shown in Tables 3 and 4, Alternative 1A is expected to provide similar arterial LOS and travel times to Alternative 1. (See Appendix D for Synchro outputs).

5.2.3 Cost Estimate

The estimated construction cost for Alternative 1A would be the same as Alternative 1, except that additional signal work would be needed at the intersections of Indian Street and Rodd Street, Indian Street and Ashman Street, Buttles and Rodd Street, and Buttles and Rodd Street and Ashman Street. Up to $400,000 in additional funding could be needed to upgrade the signals and infrastructure to accommodate the conversion of Ashman and Rodd Streets to two-way traffic.

5.3 Alternative 2

5.3.1 Transportation Improvements

Under Alternative 2, Segment 1 would consist of converting the existing US-10 BR (Indian Street/Patrick Road and Buttles Street/Lyon Road) one-way pair to two bi-directional roadways. The existing US-10 BR three-lane cross sections would both be converted to a five-lane cross section (two 12-foot travel lanes in each direction and a 12-foot TWLTL. Under this alternative, the Indian Street intersections with Bayliss and Cronkright Streets would be signalized. Additionally, all signalized intersections would be upgraded and retimed. A 10-foot multi-use path would also be constructed on the south side of Buttles Street. See Figure 3 for the proposed transportation improvements under Alternative 2.

The proposed improvements for Segments 2 and 3 are the same as noted above for Alternative 1.

5.3.2 Capacity Analysis

Under Alternative 2, within Segment 1 it was assumed that traffic would utilize Indian Street/Patrick Road and Buttles Street/Lyon Road) equally. This required redistributing the year 2040 No Build peak hour through traffic volumes along both US-10 BR corridors (Indian Street/Patrick Road and Buttles Street/Lyon Road) evenly between the pairs. Fifty percent of the US-10 BR peak hour traffic volume was modeled utilizing Indian Street/Patrick Road, and the remaining 50 percent of the traffic volume was modeled as utilizing Buttles Street/Lyon Road.

Similarly, traffic on the cross street approaches was redistributed based on the same 50 percent/50 percent redistribution split used for the US-10 BR through volumes. Fifty percent of the cross street turning movement traffic was modeled turning onto Indian Street/Patrick Road, and the remaining 50 percent was modeled turning onto Buttles Street/Lyon Road. Additionally, for traffic entering and progressing into the network at the US-10 BR (Patrick Road) and Washington Street intersection, it was assumed that traffic would spread out through the downstream intersections to get onto US-10 BR (Lyon Road). It was assumed that 30 percent of the westbound traffic at the US-10 BR (Patrick Road) and Washington Street intersection would turn left and proceed south to westbound US-10 BR (Lyon Road), then an additional 10 percent of the westbound traffic would make the same turning maneuvers at the US-10 BR (Patrick Road)/Bayliss Road intersection. Finally, the remaining 10 percent would continue to US-10 BR (Lyon Road) from Jefferson Street.

To achieve optimal progression through the US-10 BR corridor, the signalized intersections along Segment 1 were modeled as fully actuated-coordinated signals operating with 80 and 90 second cycle lengths during both the AM and PM peak hours, respectively. A 3.5 second yellow and 2.0 second all red clearance interval were used at each of the study intersections. Similarly, pedestrian intervals of 7.0 seconds for walk and 13.5 seconds for flash don't walk were used for each intersection approach. Along Segment 1, the splits and offsets at each intersection were optimized to the traffic signal detectors, to promote optimal progression. Within Segment 1, Alternative 2 would require the following:

1. Convert US-10 BR (Patrick Road)/Bayliss Street to a fully actuated-coordinated signal utilizing the timing parameters noted above.
2. Convert US-10 BR (Indian Street)/Cronkright Street to a fully actuated-coordinated signal utilizing the timing parameters noted above.
3. Install a new signal where Buttles Street and Indian Street meet Eastman Avenue. This is necessary to ensure the redistributed traffic along the converted roadways can safely enter the Segment 1 network while maintaining corridor progression. The east leg (Indian Street) of the proposed signal) would need dual right turn lanes onto northbound US-10 BR (Eastman Avenue); the south leg (Buttles Street) would require two through lanes onto northbound US-10 BR (Eastman Avenue); the north leg (Eastman Avenue) would need one southbound through lane onto Buttles Street, and one southbound left turn lane onto US-10 BR (Indian Street). This intersection will utilize the signal timing parameters noted above.
4. Dual eastbound right-turn lanes at US-10 BR (Patrick Road)/Washington Street.
5. Dual southbound left-turn lanes at US-10 BR (Lyon Road)/Washington Street.
6. One westbound through and two westbound left turn lanes at US-10 BR (Indian Street)/Jerome Street.
7. One westbound through and two westbound left turn lanes at US-10 BR (Buttles Street)/Jerome Street.

Under Alternative 2, Segment 1 intersections would operate at an overall LOS C or better, while Segment 2 and 3 intersections would operate at an overall LOS D or better during the AM and PM peak hours, as shown in Table 2. The following movements would operate at a failing LOS (LOS E or F) (See Appendix E for Synchro outputs):

- US-10 BR (Lyon) at Washington Street
  - NBL, PM – F/94.1 seconds of delay
- US-10 BR (Lyon) at Jefferson Street
  - NBT, PM – E/60.9 seconds of delay
- US-10 BR (Buttles Street) at Jerome Street
  - WBL, AM – E/60.1 seconds of delay
- US-10 BR (Eastman Avenue) at St. Andrews Road
  - EBL, PM – E/59.7 s
- US-10 BR (Eastman Avenue) at Saginaw Road
  - SBL, AM – F/91.0 s
  - EBL, PM – F/182.4 s
  - NBL. PM – E/77.1 s
  - SBL, PM – F/68.9 s
- US-10 BR (Eastman Avenue) at Airport Road
  - EBL, PM – E/61.3 s
  - WBL, AM – E/57.2 s, PM – E/63.1

- WBT, AM – E/62.7 s

The arterial LOS for each segment is shown in Table 3. As shown in the table, Segment 1 would operate at LOS C or better. Converting Segment 1 to bi-directional roadways, and adding two additional signals at US-10 BR (Patrick Road)/Bayliss Street and US-10 BR (Indian Street)/Cronkright Street would create additional delays which in turn results in a general decrease in average arterial travel speeds when compared to the No Build Conditions. Segment 2 would operate at LOS B with an increase in average arterial travel speeds, while Segment 3 would operate at LOS D with an increase in average arterial travel speeds when compared to the No Build conditions.

The arterial travel times (Table 4) for Segment 1 show an overall increase for both eastbound and westbound traffic along US-10 BR. This can be attributed to the two new signalized intersections needed at US-10 BR (Patrick Road)/Bayliss Street and US-10 BR (Indian Street)/Cronkright Street and converting the one-way roadways to bi-directional roadways, thus creating additional delays that are currently not experienced.

The arterial travel times for Segments 2 and 3 show an overall decrease for both northbound and southbound US-10 BR (Eastman Avenue) when compared to the No Build Conditions. This can be contributed to the intersection improvements done at the North Saginaw Road, East Wackerly Street, and Airport Road intersections which improveoverall operations and decrease congestion.

There were several issues and considerations that arose while performing the Alternative 2 analysis. This included the following:

1. The permitted/protected left turn phases at the US-10 BR (Buttles Road) and Jerome Street intersection were changed from lagging to leading to avoid the potential for a yellow-turn trap situation as well as increase capacity and improve overall operations. This does not exactly follow the MDOT signal optimization guidelines, as the guidelines specify that a permitted/protected left-turn should lag the through movement; however, a leading left turn phase can be used if there is a significant benefit and approved by MDOT. Similarly, several protected left-turn movements were changed from leading to lagging for better progression along the corridor. Furthermore, implementing these changes promotes the best possible progression for the US-10 BR corridor.
2. The new signal at Eastman Avenue/Buttles Street/Indian Street could need a significant amount of right-of-way acquisition to properly construct the appropriate intersection laneage and geometry.
3. There could theoretically be safety implications when converting one-way roadways to bi-directional roadways. The number of conflict points through each intersection is increased which could increase the likelihood of crashes.
4. To mitigate the failing movements and overall intersection operations, the US-10 BR intersections at Jerome Street and Washington Street would be good candidates for two-lane roundabouts. However, a considerable amount of right-of-way would be needed at the Jerome Street intersections.

5.3.3 Cost Estimate

The estimated construction cost for Alternative 2 is approximately $35,680,000, in year 2016 dollars. ROW acquisition, design, and construction engineering costs are not included.

5.4 Alternative 3

5.4.1 Transportation Improvements

Under Alternative 3, the existing US-10 BR one-way pair (Segment 1) would be converted to two bi-directional roadways. The US-10 BR (Indian Street/Patrick Road) corridor would be converted to a five-lane cross section with two 12-foot eastbound and westbound travel lanes and a 12-foot center TWLTL. Under this alternative, Indian Street/Patrick Road would be designated as US-10 BR. Buttles Street/Lyon Road would be converted to a three-lane cross section (one 12-foot eastbound travel lane, one 12-foot westbound travel lane, and a center 12-foot TWLTL) and converted to a local road under the City of Midland's jurisdiction. A 10-foot multi-use path would also be constructed on the south side of Buttles Street. See Figure 4 for the proposed transportation improvements under Alternative 3.

The proposed improvements for Segments 2 and 3 are the same as noted above for Alternatives 1 and 2.

5.4.2 Capacity Analysis

Under Alternative 3, it was assumed that 70 percent of the US-10 BR peak hour through traffic volumes would utilize the US-10 BR (Indian Street/Patrick Road) corridor, and the remaining 30 percent of the traffic volumes would utilize the Buttles Street/Lyon Road corridor. Similarly, traffic on the cross street approaches would be redistributed based on the same 70 percent/30 percent split used for the US-10 BR segment through traffic volumes. Seventy percent of the cross street turning movement traffic was modeled turning onto US-10 BR (Indian Street/Patrick Road), and the remaining 30 percent was modeled turning onto Buttles Street/Lyon Road.

To achieve optimal progression through the US-10 BR corridor, the cycle lengths and timings would be the same as Alternative 2. Within Segment 1, Alternative 3 would require the same signal improvements that are noted for Alternative 2 along Indian Street, while the signal improvements on Buttles Street would be modified as a result of the three-lane cross section.

Under Alternative 3, the study intersections would operate at an overall LOS D or better during AM and PM peak hours, as shown in Table 2. The following movements would operate at a failing LOS (LOS E or F) (See Appendix F for Synchro outputs):

- US-10 BR (Patrick) at Washington Street
  - EBL, AM – F/125.7 seconds of delay
  - NBT, PM – E/67.3 seconds of delay
- US-10 BR (Lyon) at Washington Street
  - NBL, PM – F/76.1 seconds of delay
- US-10 BR (Eastman Avenue) at St. Andrews Road
  - EBL, PM – E/59.7 seconds of delay
- US-10 BR (Eastman Avenue) at Saginaw Road
  - SBL, AM – F/91.0 seconds of delay
  - EBL, PM – F/182.4 seconds of delay
  - NBL. PM – E/77.1 seconds of delay
  - SBL, PM – F/68.9 seconds of delay
- US-10 BR (Eastman Avenue) at Airport Road
  - EBL, PM – E/61.3 seconds of delay
  - WBL, AM – E/57.2 seconds of delay, PM – E/63.1 seconds of delay
  - WBT, AM – E/62.7 seconds of delay

arterial LOS for Alternative 3 is shown in Table 3. As shown in the table, Segment 1 would operate at LOS C or better. Converting Segment 1 to bi-directional roadways, and adding two additional signals at the US-10 BR (Patrick Road)/Bayliss Street and US-10 BR (Indian Street)/Cronkright Street intersections creates additional delays, which in turn results in a general decrease in average arterial travel speeds when compared to the No Build conditions. The arterial travel times (Table 4) for Segment 1 show an overall increase for both eastbound and westbound traffic along US-10 BR. This can be attributed to the two additional signalized intersections needed at US-10 BR (Patrick Road)/Bayliss Street and US-10 BR (Indian Street)/Cronkright Street and converting one-way roadways to bi-directional roadways, thus creating additional delays that are currently not experienced. Segment 2 shows an overall decrease for both northbound and southbound US-10 BR (Eastman Avenue) when compared to the No Build Conditions for arterial travel times. This can be attributed to the intersections improvements done at the North Saginaw Road and East Wackerly Street intersections.

The arterial LOS and arterial travel times for Segments 2 and 3 would be the same as Alternative 2.

There were several issues and considerations that arose while performing the Alternative 3 analysis.

1. The new signal at Eastman Avenue/Buttles Street/Indian Street would need a significant amount of right-of-way to properly construct the appropriate intersectional laneage and geometry.
2. There are safety concerns when converting one-way roadways to bi-directional roadways. The number of conflict points through the intersection is significantly increased which heightens the likelihood of injury and fatal type crashes.
3. To mitigate the failing movements and overall intersection operations, the US-10 BR intersections at Jerome Street and Washington Street would be good candidates for two-lane roundabouts. However, a considerable amount of right-of-way would be needed at the Jerome Street intersections.

5.4.3 Cost Estimate

The estimated construction cost for Alternative 2 is approximately $26,900,000, in year 2016 dollars. ROW acquisition, design, and construction engineering costs are not included.

5.5 Access Management

Access Management is a process or program intended to ensure the major roadway systems will operate safely and efficiently through reduction of access points (i.e., driveways and curb cuts), spacing of traffic signals, and increasing cross-property connections, while adequately meeting the access need of abutting land uses and businesses along the roadway. The use of access management techniques is intended to increase roadway capacity, manage congestion, and reduce crashes. Access management strategies could be implemented with each alternative described above.

A lack of an access management policy can adversely affect roadway operations and safety by:

- Increasing crash rates
- Aiding in a greater number of conflicts and potential hazards between vehicles, bicycles, and pedestrians
- Diverting through traffic into abutting neighborhoods to avoid congestion
- Increasing congestion with slower travel speeds and delays to arterial traffic

A lack of an access management policy can also result in a decrease in development due to poor aesthetics of the corridor for new business.

Current access spacing along the US-10 BR corridor varies significantly. In some cases, the recommended MDOT guidelines (*MDOT Access Management Guide Book*) are met. There are many examples, especially with more recent development, of well-designed access spacing from intersections and other driveways. However, for most segments with commercial uses, the number of access points and their spacing exceed the MDOT guidelines (Table 7).

Table 7: MDOT Driveway Spacing Guidelines

Speed on Roadway (MPH)	MDOT Spacing Guidelines (feet)
25	130
30	185
35	245
40	300
45	350
50	455
55	455+

One of the goals along the corridor is to bring the access spacing into better conformance with current MDOT guidelines. The strategy is to gradually remove or relocate the access points that are the least conforming. Collaboration between the City of Midland and MDOT toward implementation should include coordination between the City and MDOT regarding any proposed development requiring a break/change in access. A special provision for the US-10 BR corridor in the City's zoning ordinance is also recommended to formalize this process and alert applicants about the MDOT role. This can be accomplished in a number of ways:

1. Voluntary closure by the property owner.
2. Closure as part of an MDOT project – in some cases the owner can be convinced that if they permit the access improvement as part of the MDOT project cost, they can avoid paying for the change that may be required later by the City or MDOT.
3. Access improvement as part of the use or site plan approval for new development, a change in use or expansion that increases traffic.
4. As part of an MDOT access permit review and approval (note the city should notify MDOT of any new development or changes proposed on a commercial site that may increase the amount of traffic or change the traffic pattern at the access point).

Decisions regarding changes to access are based in part on the proposed use and the traffic operations at the time of application. Higher priority access points and potential improvements within the corridor are identified below. This list could be used by the City and MDOT in the review of access as part of road design improvements or site plan/access permit reviews. There may also be other lower priority opportunities that are not listed.

Segment 1

- Terminate the access permits and remove the existing former residential driveways that are not currently used (their presence gives the impression that those access points will remain).

- Promote a shared access system from the existing office building through the vacant lot at the northwest corner of Indian and McDonald.
- Direct all future access to be only from the side streets, especially on Indian and Buttles Streets. For existing parcels in the middle of a block, promote shared access with adjacent properties.

Segment 2

- North of Saginaw Road (south of Sylvan Lane)
  - Close one of the access points to the Chevrolet dealership (consideration is needed for truck access to the bay doors facing the street).
  - The mixed tenant buildings with a scuba shop, salon, etc. – consolidate the access.
  - Close the Eastman Avenue access at the PNC bank which has access to a side street.
  - Eastman Party Store – close the northern access.
  - Mixed use building south of the party store – close the north driveway.
- Close the unused driveway south of Wackerly Street.
- Close the driveway along Eastman Avenue for the building at the northeast corner of Dilloway Drive (site has access to two side streets).

Segment 3

- Close one or both driveways when the former bank south of the Panera redevelops; connect access with uses to the north and/or south.
- Close the Speedway driveway closest to the US 10 interchange ramp (south of Airport Road). Increase the inbound driveway radii so entering traffic has less impact on traffic flow and potential for rear-end collisions.

Table 8. Alternatives Evaluation Matrix

Evaluation Criteria	Comments	Alternatives		
		Alternative 1	**Alternative 2**	**Alternative 3**
Traffic Operations	Overall efficiency of traffic operations. Factors include intersection operations and changes to travel time for US-10 BR.	High All intersections would operate at LOS C or better except for two intersections. When compared to Alternatives 2 and 3, Alternative 1 would have a slightly better arterial LOS and lower travel time through the corridor.	High All intersections would operate at LOS C or better. Alternative 2 would have a slightly better arterial LOS and lower travel time when compared to Alternative 3.	High All intersections would operate at LOS C or better, except for one intersection.
Safety	Degree to which alternatives may reduce total crashes, injury crashes, and conflicts for vehicular and non-motorized users.	Moderate When compared to Alternatives 2 and 3, one-way roadways have fewer crashes than two-way roadways. Pedestrian crossing distance reduced via lane reduction on Indian and Buttles. Bicycle facility would separate on-street bicyclists from vehicular traffic.	Low Two-way traffic and five-lane cross sections would likely increase the number of crashes along the corridor. Pedestrians less safely accommodated than Alternatives 1 & 3 as pedestrians have to travel across five-lanes of traffic and traffic is traveling in two directions.	Low Two-way traffic and five-lane cross section would likely increase the number of crashes along Indian. Would likely have less crashes than Alternative 2 due to the three-lane cross section and local street designation on Buttles. Pedestrians less safely accommodated than Alternative 1 as pedestrians have to travel across more travel lanes and traffic is traveling in two directions.
Non-motorized Facilities – Pedestrians	Degree to which alternatives accommodate pedestrians. Assessment is based upon (1) providing connectively to/from Downtown and (2) presence of paths/sidewalks connecting local streets to US 10 BR paths/sidewalks.	Pedestrians fully accommodated via existing sidewalks and multi-use path, and construction of new sidewalk connections.	Pedestrians fully accommodated via existing sidewalks and multi-use path, and construction of new sidewalk connections, five-foot sidewalk on the north side of Indian, and ten-foot multi-use path on the south side of Buttles.	Pedestrians fully accommodated via existing sidewalks and multi-use path, and construction of new sidewalk connections, five-foot sidewalk on the north side of Indian, and 10-foot multi-use path on the south side of Buttles.
Non-motorized Facilities – Bicyclists	Degree to which alternatives accommodate bicyclists. Assessment is based upon (1) providing connectively to/from Downtown; (2) presence of non-motorized facilities connecting from local streets to US 10 BR non-motorized facilities; and (3) presence of non-motorized facilities along US-10 BR.	Bicyclists fully accommodated via existing multi-use path and construction of new bicycle facility within the US-10 BR ROW. Bicycle facility would physically separate on-street bicyclists from vehicular traffic.	Bicyclists fully accommodated via existing multi-use path, and construction of a ten-foot multi-use path on the south side of Buttles. Some bicyclists would likely remain riding in the roadway on US-10 BR.	Bicyclists fully accommodated via existing multi-use path, and construction of a ten-foot multi-use path on the south side of Buttles. Some bicyclists would likely remain riding in the roadway on US-10 BR.
Right-of-Way Acquisition	Impacts to businesses and residences caused by construction of project.	Low No additional ROW required.	High Potential high impacts to green space between Indian & Buttles, and businesses/residences located along Indian and Buttles between Haley St. and W Union St.	Moderate Moderate impacts to green space between Indian & Buttles, and businesses/residences located along Indian and Buttles between Haley St. and W Union St.
Planning Level Construction Cost	Includes construction cost for improvements to US-10 BR for 20-year time horizon. All estimates in year 2017 dollars. Engineering and Right-of-Way cost not included in estimate.	Segment 1 – $4,610,000 Segment 2 – $4,310,000 Segment 3 – $1,780,000 **TOTAL - $10,700,000**	Segment 1 – $29,590,000 Segment 2 – $4,310,000 Segment 3 – $1,780,000 **TOTAL - $35,680,000**	Segment 1 – $20,810,000 Segment 2 – $4,310,000 Segment 3 – $1,780,000 **TOTAL - $26,900,000**
Long Term Operational Cost	Cost of ongoing operations including electricity (lighting), signal adjustment, bulbs/other equipment, mowing, maintenance, pavement markings, etc.	Moderate	High	Moderate-High
Environmental Impacts	Degree to which alternatives impact surrounding resources (e.g., cultural resources, noise, parks, green space, etc.)	Low	Low to Moderate	Low to Moderate
Context Sensitive Design	Opportunities for aesthetic enhancements.	Modest opportunities for aesthetic enhancement in remaining ROW.	Limited opportunities for aesthetic enhancement in remaining ROW.	Limited opportunities for aesthetic enhancement in remaining ROW.

Notes:
The low/moderate/high rankings provide a qualitative comparison of relative impacts among the alternatives. These rankings were based on the professional judgment of the interdisciplinary project team.
The alternative(s) which best address each individual evaluation criteria are highlighted in green.

6.0 CONCLUSION AND RECOMMENDATIONS

Based on Steering Committee, Stakeholder, and Public meetings, and the information provided in Table 8, the roadway improvements (lane reductions, signal upgrades, turn lane additions) from Alternative 1 were selected to be carried forward as the basis of the Preferred Alternative. It is also recommended that the access management strategies described in Section 5.5 be implemented as part of the Preferred Alternative. Alternative 1 was selected as the basis for the Preferred Alternative because it provides good traffic operations, reduces the number of travel lanes pedestrians need to cross, has the lowest cost, does not generate right-of-way impacts, and provides the best opportunity to accommodate non-motorized users.

The non-motorized improvements proposed as part of Alternative 1 were modified for the Preferred Alternative as a result of the Stakeholder and public involvement process. As shown on Figure 2, within Segment 1, the Preferred Alternative would provide non-motorized facilities on Indian Street and Buttles Street. Currently along Indian and Buttles Streets, there is approximately 22-26 feet of width available to implement the non-motorized options. This width includes the existing outside travel lane to the existing right-of-way line, allowing sufficient room for bike lanes, non-motorized paths, sidewalks, and/or green/buffer strips. The following non-motorized options will be considered by MDOT as the Preferred Alternative design is further developed:

1. Barrier (separating the travel lane from the bike lane), one-way, on-street bike lanes on Indian Street (westbound) and Buttles Street (eastbound), green strip, and five-foot sidewalks. Under this option, the outside travel lane (third lane) would be converted to on-street bike lanes with a four-foot buffer and an eight-foot on street bike lane. See Figure 6 for example bike lane separators.
2. Barrier, bi-directional, ten-foot bike lane along Buttles Street, green strip, and a five-foot sidewalk. Under this scenario, the outside lane along Indian could be a one-way, on-street bike lane, converted to green space, or maintained as a traffic lane.
3. One-way, on-street bike lanes on Indian Street and Buttles Street, green strip, and a ten-foot non-motorized path along Buttles Street. Under this option, typical six-foot on-street bike lanes would be provided along Indian Street and Buttles Street.

With the Preferred Alternative reducing the number of travel lanes (i.e., road diet), MDOT will implement a formal public involvement process to further inform the public of the project, solicit additional comments, and help select the preferred non-motorized option(s).

The Preferred Alternative could be implemented in phases. MDOT is considering the possibility of implementing the first phase in 2017. The first phase would include lane reduction, signal timing adjustments, and one-way, on-street bike lanes from State Street to Jerome Street. This initial phase would also be used a trial period to determine if the lane reduction will accommodate traffic volumes without significantly impacting traffic flow.

Phasing for the Full implementation of Segment 1 and implementation of Segments 2 and 3 has yet to be determined.

Backup material for agenda item:

5. Authorizing the City Clerk to submit the required grant application on behalf of the City of Midland for new election equipment. TISDALE

SUMMARY REPORT TO CITY MANAGER
for City Council meeting of March 27, 2017

SUBJECT: State Purchase of New Election Equipment

INITIATED BY: Selina Tisdale, Director of Community Affairs

RESOLUTION SUMMARY: This resolution authorizes the City Clerk to submit the required State Grant Application on behalf of the City of Midland for new election equipment to be used within the municipality.

ITEMS ATTACHED:

1. Letter of transmittal
2. Resolution

CITY COUNCIL ACTION:

1. 3/5 vote required to approve resolution

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

March 20, 2017

Jon Lynch, City Manager
City of Midland
Midland, MI 48640

Dear Mr. Lynch:

In March, Michigan Secretary of State Ruth Johnson approved contracts for the purchase of new voting equipment that all Michigan voters will use for the next ten years. The new equipment purchase will include ballot tabulators, accessible devices for use by voters with disabilities and election-management and reporting software.

The new equipment will be paid for with $30 million in federal Help America Vote Act money that the Secretary of State's Office has saved for more than a decade along with $10 million approved by the State Legislature. This funding will cover most of the up-front costs for the new systems. Cities and townships will pay for the remaining cost, which will vary, depending on their vendor selection, and costs for extended service and maintenance, which will begin in the 6th year of the contract period.

Midland County has already selected ***Dominion Voting*** as its equipment vendor. The first-year purchase cost will be approximately $15,000. This provides for the purchase of protective cases that will keep the equipment safe during transport and storage and also provides for the purchase of additional accessible devices for voters with disabilities wanting to vote absentee at Midland City Hall. This funding is budgeted for in the current-year budget, as it was anticipated we would be contributing toward the purchase of the new election equipment. The maintenance costs for years six through ten are projected to be $615/precinct for a total annual maintenance cost to Midland of $14,760 for our 24 precincts.

The new voting equipment is expected to be implemented State-wide by August 2018 and provides the latest in ballot-scanning and election-night reporting technology while still providing a paper ballot for reference, if needed.

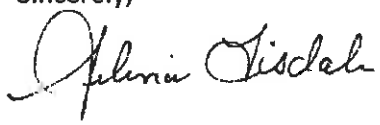
The new systems all use up-to-date digital optical scan technology, which include notable improvements and increased ease of use for voters and election administrators. The systems allow for electronic storage of ballot images, a feature that will be useful during post-election audits. Improvements in the election management system software will save county and local clerks time and money in preparing for elections and providing election results. The options available for voters with disabilities are also greatly improved, and contractors will be required to continually assess and improve the systems, based on feedback. The contracts also cover service and maintenance for the first five years.

A team of Michigan Bureau of Elections staff, local election officials and purchasing agents from the Secretary of State's Office and the Michigan Department of Technology, Management and Budget reviewed the proposals and equipment before recommending approval of a contract with the three selected vendors. Elections staff sought extensive feedback about the systems from local election officials and advocates for Michigan voters with disabilities.

The election equipment currently being used by the City of Midland, and jurisdictions throughout the State, has been in service for the past 12 years and is nearing the end of its expected lifespan. Current election equipment was rolled out in 2004 and 2005 when Michigan began using optical-scan voting systems statewide. Michigan is one of the only states with a substantial amount of federal funds still available to assist with the purchase of the next-generation voting systems.

Attached is a resolution authorizing the Midland City Clerk to submit the required State Grant Application on behalf of the municipality and requests that the State of Michigan purchase the new election system to be used within the City of Midland.

Sincerely,



Selina Crosby Tisdale
Director of Community Affairs
City of Midland
989-837-3304
stisdale@midland-mi.org

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

BY COUNCILMAN

WHEREAS, Midland City Council wishes to apply to the Secretary of State for a grant to purchase a new voting system from Dominion Voting, which includes precinct tabulators, accessible voting devices for use by individuals with disabilities, and related Election Management System software; and

WHEREAS, full funding for the new voting system will be provided by the State, and will include a combination of Federal Help America Vote Act and State-appropriated funds; and

WHEREAS, the City of Midland plans to begin implementation of the new voting system in 2017; and

WHEREAS, the deadline for submitting the required State Grant Application is April 14, 2017; now therefore

RESOLVED, that the City of Midland Clerk is authorized to submit the required State Grant Application on behalf of the City of Midland, Midland County for the State-purchase of the new election system to be utilized within the City of Midland, Midland County.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

Selina Tisdale, City Clerk

Backup material for agenda item:

6. * Accepting four new street segments into the City of Midland Local Street System as required by the Michigan Department of Transportation for Act 51 funding. MCMANUS

SUMMARY REPORT TO THE CITY MANAGER
for Council Meeting of March 27, 2017

SUBJECT: NEW STREET CERTIFICATION

INITIATED BY: City of Midland Engineering Department

RESOLUTION SUMMARY: This resolution accepts four new street segments into the City of Midland Local Street System as required by the Michigan Department of Transportation for Act 51 funding.

ITEMS ATTACHED:
1. Cover Letter
2. Resolution
3. Location Maps

CITY COUNCIL ACTION: 3/5 vote required to approve resolution

SUBMITTED BY: Brian P. McManus, City Engineer

JNF
RDCERT17.RPT

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

DATE: March 20, 2017

TO: Jon Lynch, City Manager

FROM: Brian P. McManus, City Engineer

RE: Annual Road Certification

The Michigan Department of Transportation (MDOT) requires an annual certification report from all agencies that receive funding from the gas and weight tax through the Act 51 process. The certification includes the number of street miles which is also a component of how funding from the gas and weight tax is allocated to agencies.

This annual road certification report to MDOT adds street segments for the purpose of maintaining an accounting of the number of street miles within the City. When changes are made to our street system, such as adding or deleting streets, then these changes need to be reflected on our certification report. In addition, MDOT requires that the City Council pass a resolution accepting all new streets into our public street system.

For the current certification report, several new road segments were constructed and open to traffic before December 31, 2016. These road segments include Sugnet Road, Powder Horn Trail, Foxfire Drive and Woodduck Way.

Sugnet Road was constructed, in part, through federal funding made available to the City through our participation in the Midland Area Transportation Study. Federal funding is to be directed for public streets built within public rights-of-way. Sugnet Road was built on City of Midland property obtained in 1999.

Powder Horn Trail, Foxfire Drive and Woodduck Way were constructed as part of the Foxfire Site Condominium. The streets within the Foxfire Site Condominium were identified to be public roads during the site plan approval process. An easement for street right-of-way within the Foxfire Site Condominium was granted to the City in 2016.

The attached resolution certifies that the specified new streets are constructed on public rights-of-way and are to be used for public street purposes. The certified street mileage is used to disperse road maintenance funds from the State of Michigan. Our current certified street mileage is as follows and will be reported in our next update to MDOT:

LOCAL STREETS	150.11 miles
MAJOR STREETS	86.12 miles

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BY COUNCILMAN

WHEREAS, certain streets have been constructed within the City of Midland as listed below:

Sugnet Road	from Whiting Drive to Dublin Avenue
Powder Horn Trail	from the west line of Foxfire Subdivision No. 1 to Foxfire Drive
Foxfire Drive	from Powder Horn Trail to Woodduck Way
Woodduck Way	from Foxfire Drive to the west line of Foxfire Subdivision No. 1

; and

WHEREAS, Sugnet Road is in the property warranty deed recorded in Liber 878 page 669 and Liber 899 page 903 at the Register of Deeds, County of Midland; and

WHEREAS, Powder Horn Trail, Foxfire Drive and Woodduck Way are in the easement recorded in Liber 1602 Page 1356 at the Register of Deeds, County of Midland; and

WHEREAS, said streets were constructed and open to traffic prior to December 31, 2016; and

WHEREAS, it is necessary to furnish certain information to the State of Michigan to place said streets within the City of Midland Street System for the purpose of obtaining funds under Act 51, P.A. 1951 as amended; now therefore

RESOLVED, that said streets are located within public rights-of-way under the control of the City of Midland; and

RESOLVED FURTHER, that the City of Midland hereby accepts the above public streets into the City of Midland Local Street System for public street purposes.

YEAS:

NAYS:

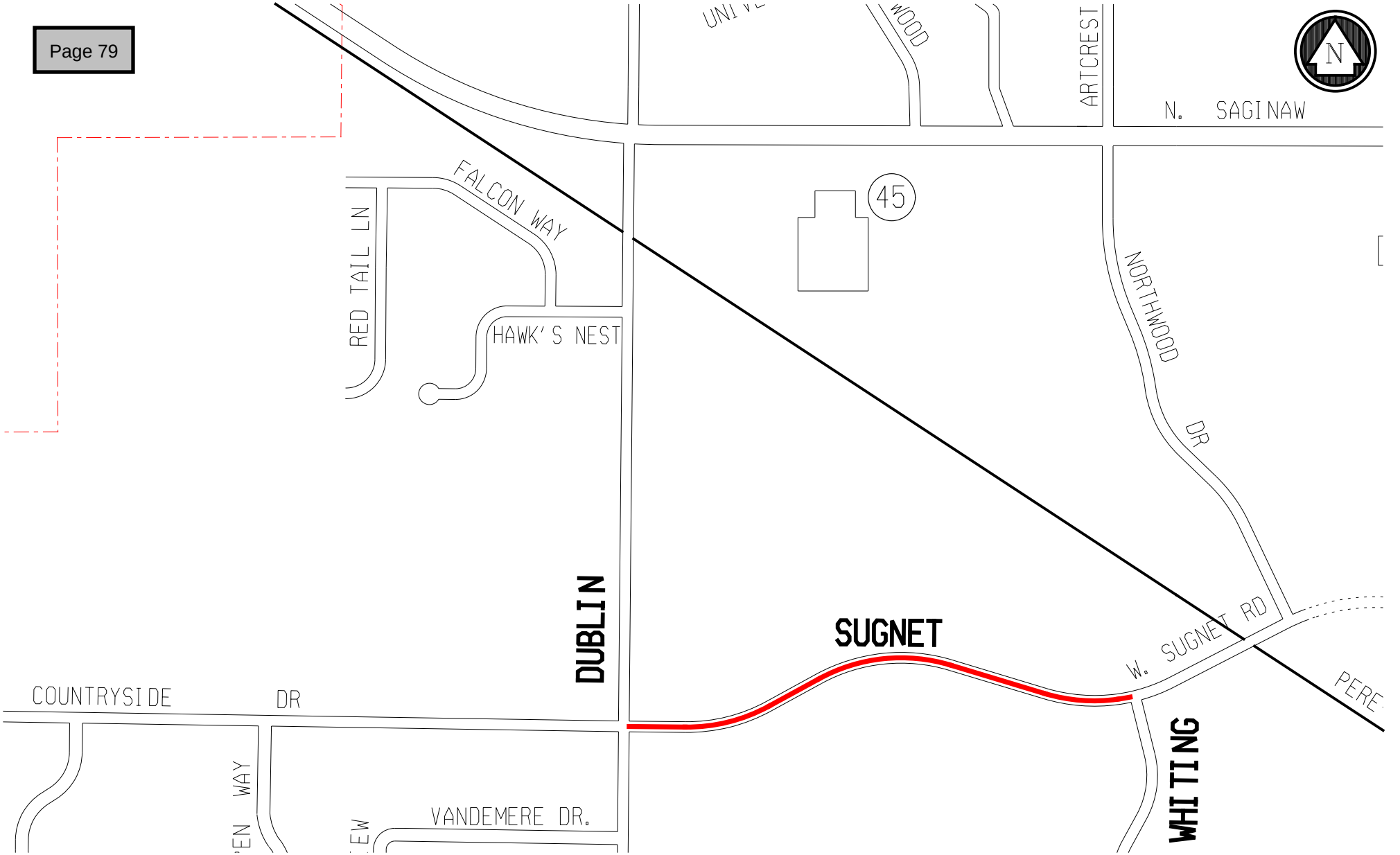
ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

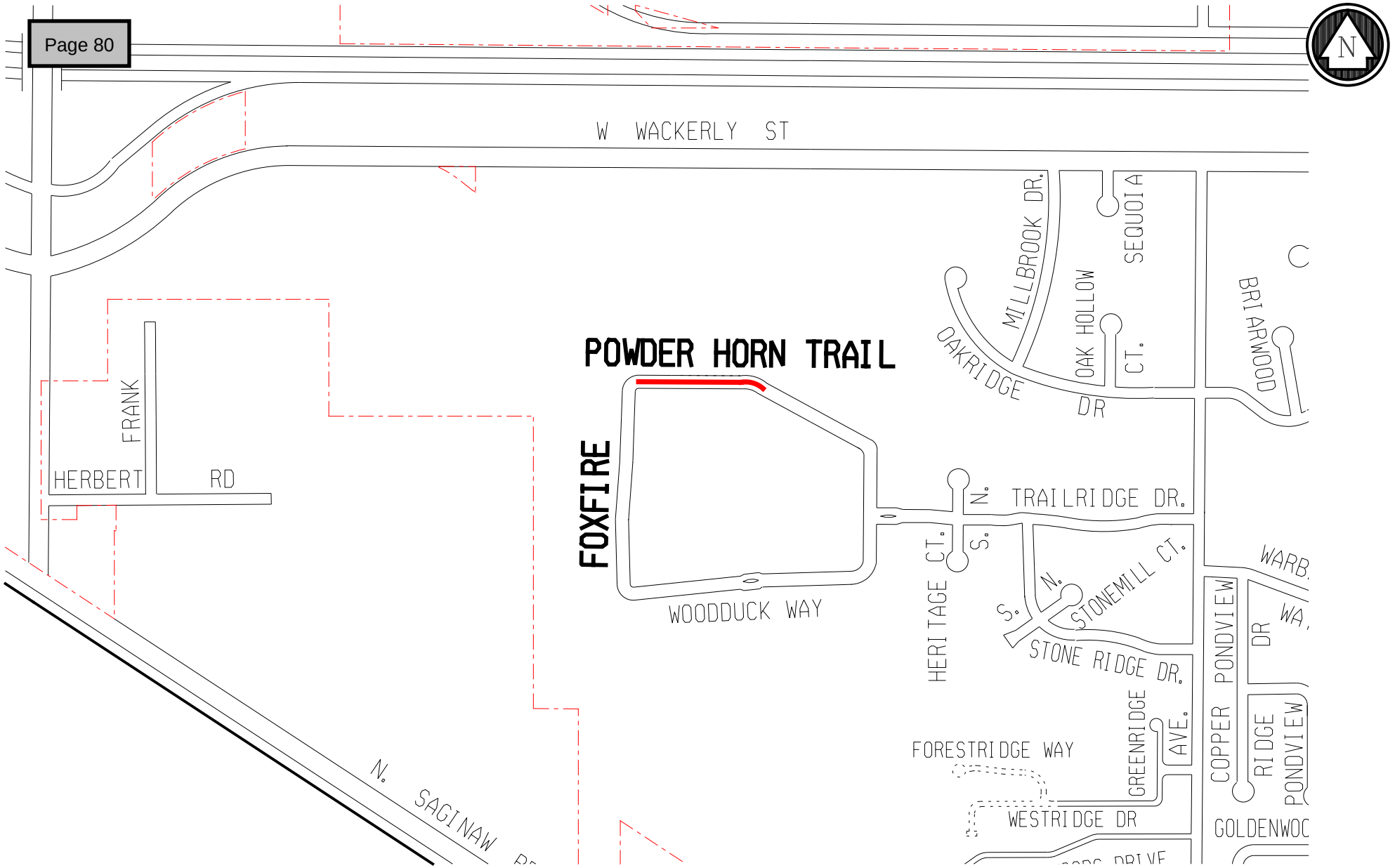
Selina Tisdale, City Clerk

RDCERT17.RES
JNF



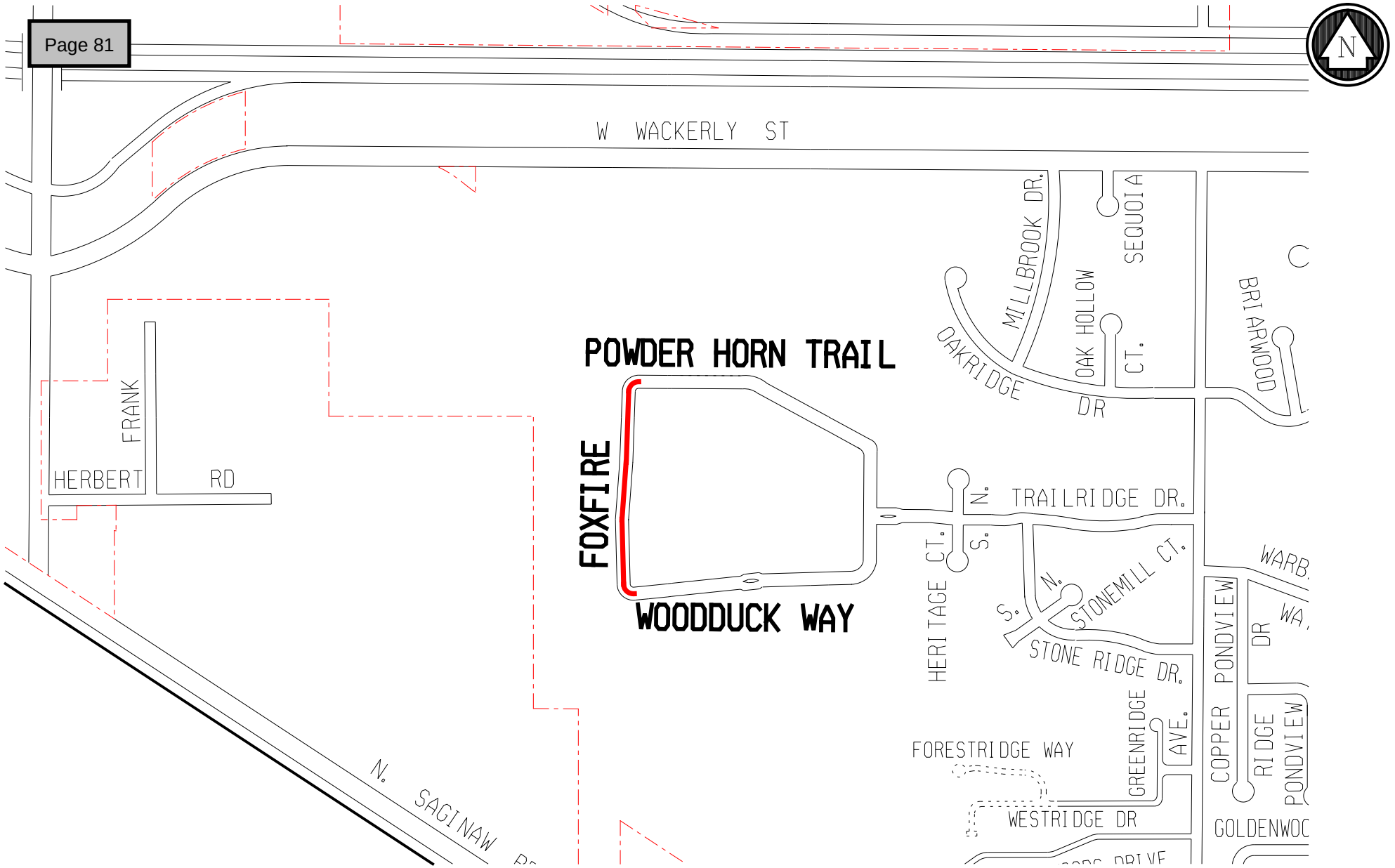
SUGNET ROAD

DUBLIN TO WHITING



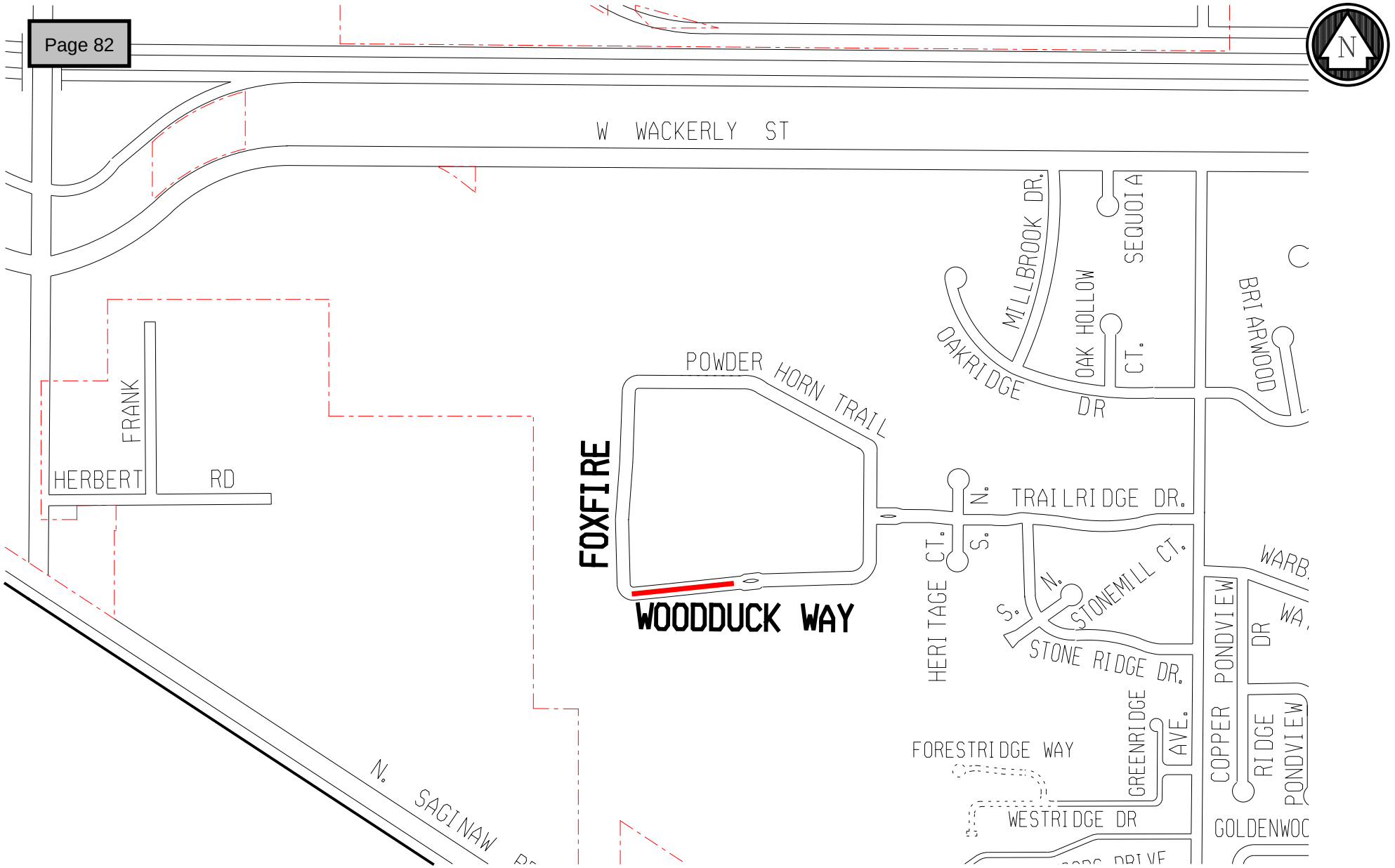
POWDER HORN TRAIL

FOXFIRE TO EXISTING STREET



FOXFIRE DRIVE

POWDER HORN TRAIL TO WOODDUCK WAY



WOODDUCK WAY

FOXFIRE TO EXISTING STREET

Backup material for agenda item:

7. * Approving the request to conduct a March for Science - Midland on Saturday, April 22. MCMANUS

SUMMARY REPORT TO CITY MANAGER
for City Council Meeting of March 27, 2017

SUBJECT: MARCH FOR SCIENCE – MIDLAND

INITIATED BY: City of Midland Engineering Department

RESOLUTION SUMMARY:

The attached resolution approves the request from James Crissman to conduct a March for Science – Midland on Saturday, April 22, 2017, utilizing the public right-of-way.

ITEMS ATTACHED:

1. Letter of transmittal
2. Event application
3. Resolution

CITY COUNCIL ACTION:

3/5 vote required to approve resolution

SUBMITTED BY: Brian McManus, City Engineer

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

March 20, 2017

Jon Lynch, City Manager
City of Midland
Midland, MI 48640

Dear Mr. Lynch:

Attached please find a request from James Crissman to conduct a March for Science - Midland on Saturday, April 22, 2017, utilizing the public right-of-way. The Administrative Staff has reviewed the request and recommends approval subject to the following conditions:

- The responsible party and contact number for the event date is James Crissman, 989-297-3009.
- There is a possibility the Tridge project may be starting around the date of this request. If so, the walk would need to end on the Rail Trail side of the river. Also, organizer may want an alternate end if we are experiencing any spring flooding.
- Police officers will not be available for this event. All walkers shall stay on the sidewalks and pedestrian trail and observe all traffic laws and traffic control devices.
- Special authorization for food trucks would be required from the City Attorney's Office, 837-3395.
- Trail must be cleaned up afterwards to remove any litter.

Attached for your consideration is a resolution which will grant approval of the request. The resolution also grants authority to the Administrative Staff to approve future requests if conducted in substantially the same manner.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Brian P. McManus
City Engineer

BPM:pp

Enclosure

City of Midland
333 W. Ellsworth * Midland, MI 48640
Main: (989) 837-3300 General Questions: cityhall@midland-mi.org

EVENT APPLICATION

Sponsoring Organization March for Science - Midland Contact Person/Position JIM CRISSMAN - ORGANIZER

Please describe your organization Ad hoc org. to promote science in public policy Non-profit organization: Y / (N)

Phone (989) 297-3009 E-Mail jwcrissman@gmail.com

Address 2687 Oakhaven Ct. City Midland State MI Zip 48642

Name of Proposed Event March for Science - Midland

Brief Description of Event Rally & speakers at Carpenter school gym (3-4 pm) then march through downtown, end near bridge.

Requested Date(s) of Use 4/22/17 Requested Time(s) of Use ~4 - 5 pm Is this a repeat event? no

Proposed Event Timeline: Setup to Begin no set up Duration of Event ~ 1 hr. Clean up to End 6 pm

Requested Location map included Will you charge admission? no No. of Participants Expected ~~500~~ ?

What type of event are you hosting?
Run/Walk_____ Park Event_____ Downtown Event_____ Block Party/Street Closure_____ Other a march

Street Closures: Are you requesting any street closures: Y / (N) Time Streets Closed_____ Time Streets Reopened_____

Please describe: this is one of 300+ satellite marches in conjunction w the main march in Washington, DC.

Tents: Will you be utilizing tents and if so, what size are your tents? no might have

Concessions: Who will provide? food trucks Will you apply to serve alcohol? no

Power: What are your electrical needs? none

Amplified Sound: Will you be utilizing amplified sound? probably How will sound be amplified? Bullhorn

Restrooms: Will you be providing additional restroom facilities above what is already offered at the requested location? no
_____If so, who will provide this service?_____

Park Shelters: If you are holding your event in a park, will you be reserving a park shelter for your event? Yes

Other Requests: Please note that other elements of your event may require additional approval. Do you have additional requests (i.e. fireworks, etc.) police protection at major cross walks on Indian & Buttles

Equipment Rental: The City of Midland offers equipment for a fee based on availability. Please contact the Parks and Recreation Office at 989-837-6930 for additional information on rental fees. Are you interested in utilizing any of the following?

_____Mobile Stage _____Metal Fencing _____Traffic Control Devices (Cones, barricades)
_____Trash Receptacles _____Picnic Tables _____Other

Payment: Equipment rental fees must be paid in advance of event. The organization representative may receive an invoice for additional City services after completion of the event based on the final utilization of staff and resources at the event.

Submittal: Please submit the completed form to Paula Pomaville at ppomavil@midland-mi.org. A map, sketch of event layout, race route or other map must be included with this application.

City of Midland
333 W. Ellsworth, Midland, MI 48640
Main: (989) 837-3300 General Questions: cityhall@midland-mi.org

OTHER ITEMS TO NOTE

- *Some events may require City Council approval. It is recommended that you submit your request at least two months in advance of your event.*
- *Depending on the event, a certificate of special event liability insurance in the amount of $1,000,000 per occurrence, $2,000,000 aggregate, with the City of Midland named as an Additional Insured may be required.*
- *No markings of any kind (i.e. paint, spray paint, spray chalk, chalk, etc.) are permitted on the trail route surfaces.*
- *The City will review need for cost recovery for City expense if event requires unique or non-standard efforts on the City's part for any necessary set-up or clean-up of the area by the City.*
- *The use of the parks and city areas is non-exclusive. There is a potential for bystanders to view/attend your event.*
- *Events are not allowed to be conducted on the Tridge.*
- *You must contact the Parks office at least one week in advance of the event for location of tents if you choose to use them. Parks and Recreation does not provide tents. There is a $25 fee for tent location services. The Fire Department requires that all tents 400 sq. feet and larger will require additional permits. Please contact the Fire Department for this information.*
- *Any decorations must not hinder other users of the surrounding areas and all must be removed after the event. It is understood that you are fully responsible for any and all decorations, and items used at the event site.*
- *It is recommended that someone should be in attendance at the site at all times or a security service is attained.*
- *It is also understood your group will be responsible for the cleanup and disposal of refuse, leaving the site in the same or better condition than found.*
- *No event can be scheduled in the Farmer's Market area on Wednesdays and Saturdays, May-October, from 6:00 a.m. - 3:00 p.m.*
- *The Tridge area, Chippewassee Park and Emerson Park periodically encounter flooding.*
- *There are no permanent restroom facilities at Chippewassee Park or the Central Park Band Shell. Your guests will have to use a portable restroom located at the site.*

RELEASE AND HOLD HARMLESS

It is agreed by the organization using the facilities that it will be responsible for any damage to property. It is further agreed that the signing party will hold the City of Midland harmless for any damage or injury that the organization, its participants or spectators might incur during its use of the above named facilities.

It is further agreed by the organization that all debris deposited during the use of the above named facility shall be picked up and properly disposed of. Any damage will result in additional fees.

Signature of Applicant: _____ **Date:** 2/27/17

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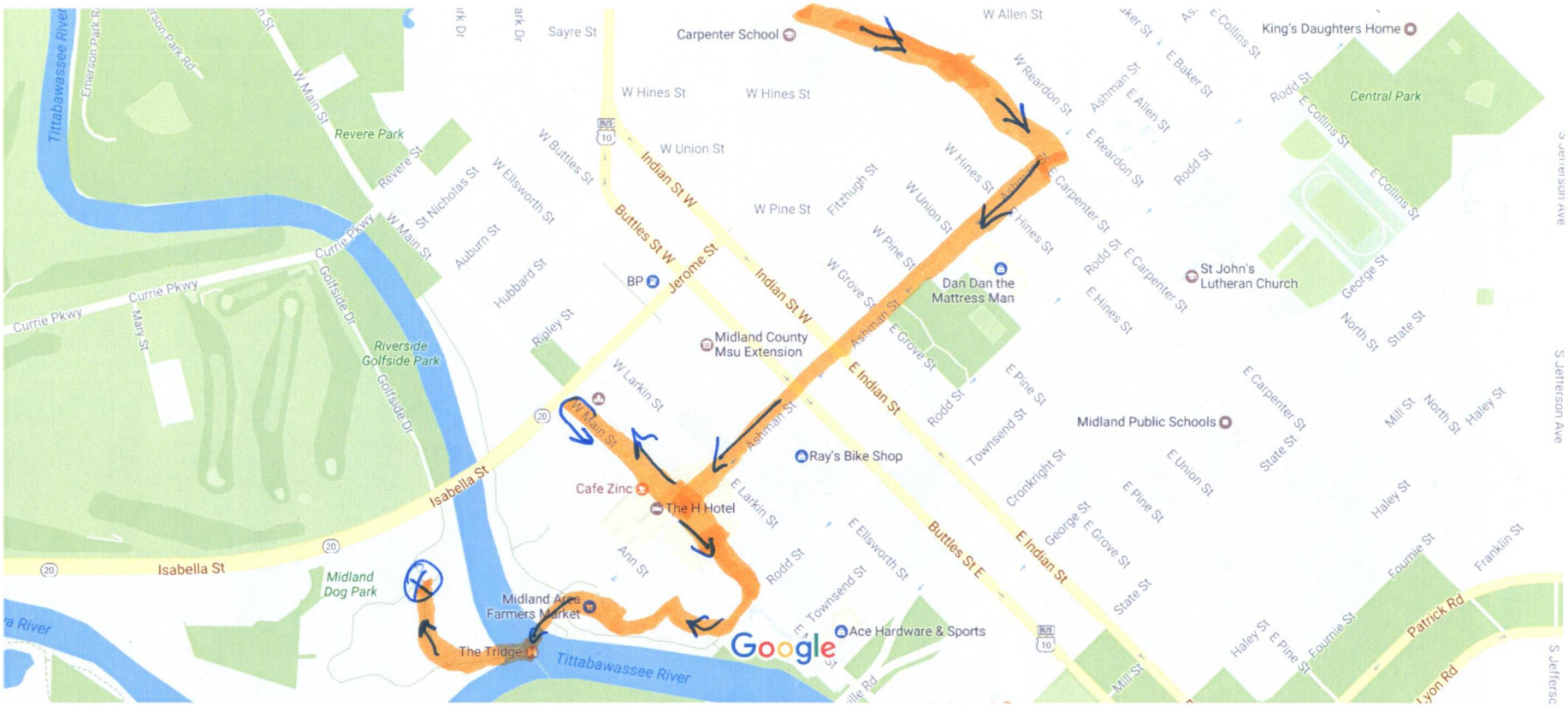
Google Maps



Map data ©2017 Google 500 ft

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BY COUNCILMAN

RESOLVED, that the request from James Crissman to conduct a March for Science – Midland on Saturday, April 22, 2017, utilizing the public right-of-way, is hereby approved subject to the following conditions:

- The responsible party and contact number for the event date is James Crissman, 989-297-3009.
- There is a possibility the Tridge project may be starting around the date of this request. If so, the walk would need to end on the Rail Trail side of the river. Also, organizer may want an alternate end if we are experiencing any spring flooding.
- Police officers will not be available for this event. All walkers shall stay on the sidewalks and pedestrian trail and observe all traffic laws and traffic control devices.
- Special authorization for food trucks would be required from the City Attorney's Office, 837-3395.
- Trail must be cleaned up afterwards to remove any litter.

; and

RESOLVED FURTHER, that the Administrative Staff is hereby authorized to approve future requests for the event provided it is conducted in substantially the same manner.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

Backup material for agenda item:

8. * Considering reappointments of incumbents to boards and commissions and establishing a timeline for filling remaining vacancies. TISDALE

SUMMARY REPORT TO THE CITY MANAGER
for City Council Meeting of March 27, 2017

SUBJECT: BOARDS AND COMMISSIONS APPOINTMENTS

RESOLUTION SUMMARY: The attached resolution reappoints members to various boards and commissions.

ITEMS ATTACHED:

1. Letter of Transmittal
2. 2017 Appointment Process and Timeline
3. List of Boards and Commissions Members with terms expiring in 2017
4. Resolution

COUNCIL ACTION:

3/5 vote required to approve resolution

Selina Tisdale
Communications Affairs Director

CITY OF Midland

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March 22, 2017

Jon Lynch, City Manager
City of Midland
Michigan

Dear Jon:

More than 70 City of Midland residents serve on the 14 City Council-appointed boards and commissions that provide Midland City Council with valuable information involving most aspects of our community, from Aviation to Zoning. Some of these boards and commissions members have been appointed to terms that will expire on June 30, 2017.

In the past, Council has followed a two-step process for filling boards and commissions vacancies. In the first step, Council considers reappointing those members with expiring terms who have expressed an interest in continuing to serve on their current board or commission. Staff liaisons have contacted the incumbents to determine their interest in being reappointed. The names of those incumbents wishing to be reappointed are attached for Council's consideration.

Once reappointments are determined, the second step of the process is to advertise the remaining vacancies and for Council to appoint new members based on the applications received and interviews conducted.

Five vacancies will exist due to incumbents who do not wish to be reappointed. In addition, there are four outstanding vacancies that need to be filled, one on the Cable Access Advisory Commission, two on the West Main Street Historic District Commission, and one on the Local Officers Compensation Commission.

Attached is a resolution that authorizes the City Council to reappoint incumbents to various boards and commissions and allow staff to begin disseminating information regarding boards and commissions vacancies.

Please contact me if you have any questions.

Sincerely,

Selina Tisdale
Community Affairs Director
(989) 837-3304

City of Midland
Boards & Commissions
2017 Appointment Process & Timeline

March 27	City Council considers reappointing incumbents.
March 28	City begins publicizing boards and commissions' vacancies and accepting applications from citizens interested in being appointed to a board or commission.
April 21	Application deadline, 5 p.m.
May / June	Council conducts applicant interviews and makes appointments.
June 30	Terms end.
July 1	New terms begin.

BOARDS AND COMMISSIONS – 2017

Listed below are the current Boards and Commissions members with terms expiring June 30, 2017 (see exception as noted in **red**) and their length of service.
YES and **NO** indicates the member's interest in being reappointed.

Aviation Advisory Commission (3-year terms) – staff liaison Brian McManus
YES Thomas Lind – first appointed June 2014 (Pilot Representative)

Board of Review (3-year terms) (terms expire April 30) – staff liaison Reid Duford
YES Denise Schneider – first appointed June 2014

Cable Access Advisory Commission (3-year terms) – staff liaison Matt Richardson
YES Roy Green – first appointed September 2002 (MCTV Access User)
Vacant position – term expires June 30, 2017 (MCTV Access User)

Dial-A-Ride Advisory Commission (3-year terms) – staff liaison Karen Murphy
YES Charlotte Williams – first appointed June 2000 (Citizen at Large)

International Fire Code Board of Appeals (3-year terms) – staff liaison Chris Coughlin
YES Jerry Davis – first appointed November 2013 (Code Professional)

Library Board (3-year terms) – staff liaison Melissa Barnard
NO Steven Markey – first appointed February 2012 (Citizen at Large)
YES Ann Moe – first appointed June 2016 (Citizen at Large)

Local Officers Compensation Commission (7-year terms) – staff liaison Selina Tisdale
Vacant position – term expires June 30, 2023 (Gerald Geyer)
NO Richard Osburn – first appointed June 2006

Parks & Recreation Commission (3-year terms) – staff liaison Karen Murphy
YES Nancy Carney – first appointed July 2011
NO John Metevia – first appointed July 2011
YES David Rice – first appointed June 2010

Planning Commission (3-year terms) – staff liaison Brad Kaye
YES James Bain, Jr. – first appointed June 2015
YES Gayle Hanna – first appointed June 2006
YES Andrew Koehlinger – first appointed June 2016

Sewer District Board of Appeals (3-year terms) – staff liaison Joe Sova

YES Don Hall – first appointed May 1998
YES James Pollack – first appointed July 1996

West Main Street Historic District Commission (3-year terms) – staff liaison Brad Kaye

YES Kari McPhillips – first appointed May 2011
NO Richard Osburn – first appointed June 2006
YES Kristin Riddle – first appointed July 2012 (Architect Representative)
Vacant position – term expires June 30, 2018 (Historic Society Representative)
Vacant position – term expires June 30, 2019

Zoning Board of Appeals (3-year terms) – staff liaison Brad Kaye

YES John Higgins – first appointed July 1996
NO Henry Holthof – first appointed April 2011 (Alternate Member)
YES Shawn Pnacek – first appointed June 2006 (Alternate Member)

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BY COUNCILMAN

WHEREAS, City staff has contacted all boards and commissions members whose terms expire June 30, 2017, to confirm their interest in being reappointed and has provided City Council with said information; now therefore

RESOLVED, that the City Council hereby reappoints the following incumbents to the following boards and commissions effective July 1, 2017 for three (3) year terms ending June 30, 2020:

Thomas Lind, Aviation Advisory Commission, Pilot Representative
Roy Green, Cable Access Advisory Commission, Citizen at Large
Charlotte Williams, Dial-A-Ride Advisory Commission, Citizen at Large
Jerry Davis, International Fire Code Board of Appeals, Code Professional
Ann Moe, Library Board, Citizen at Large
Nancy Carney, Parks & Recreation Commission, Citizen at Large
David Rice, Parks & Recreation Commission, Citizen at Large
James Bain, Planning Commission, Citizen at Large
Gayle Hanna, Planning Commission, Citizen at Large
Andrew Koehlinger, Planning Commission, Citizen at Large
Don Hall, Sewer District Board of Appeals, Citizen at Large
James Pollack, Sewer District Board of Appeals, Citizen at Large
Kari McPhillips, West Main Street Historic District Commission, Citizen at Large
Kristin Riddle, West Main Street Historic District Commission, Architect Representative
John Higgins, Zoning Board of Appeals, Citizen at Large
Shawn Pnacek, Zoning Board of Appeals, Alternate Member; and

RESOLVED FURTHER, that City Council hereby reappoints Denise Schneider, Board of Review, for a Citizen at Large term beginning May 1, 2017 and ending April 30, 2020; and

RESOLVED FURTHER, that City staff is directed to begin disseminating information regarding the remaining boards and commissions vacancies.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

Backup material for agenda item:

9. * Quality Aviation Services Contract Update. MCMANUS

SUMMARY REPORT TO THE CITY MANAGER

For City Council Meeting of March 27, 2017

SUBJECT: Quality Aviation Services Contract Update

INITIATED BY: Brian McManus, City Engineer/Airport Manager

RESOLUTION SUMMARY: This resolution authorizes the Mayor and City Clerk to execute a contract update with Quality Aviation Services.

ITEMS ATTACHED:
1. Cover Letter
2. Resolution

CITY COUNCIL ACTION: 3/5 vote required to approve resolution

SUBMITTED BY: Brian McManus, City Engineer

CITY OF Midland

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DATE: March 19, 2017

TO: Jon Lynch, City Manager

FROM: Brian McManus, City Engineer

RE: Quality Aviation Services – Contract Update

Quality Aviation Services (QAS) has been providing contract services for daily operations of Jack Barstow Airport since 2006 when they were selected under a competitive bid process. Their initial contract was for two years and since that initial two-year period, the contract has been extended annually as permitted by the contract language.

J.T. Rairigh is the owner of QAS and is the day-to-day operations manager. Tasks include all mowing, all snow plowing, staffing the terminal building, communications with and welcoming of incoming and departing aircraft, fuel sales and several other tasks. J.T. and his staff have done a stellar job of keeping Jack Barstow Airport well maintained, attractive and a welcomed site to arrive and depart from.

We desire to extend the contract on a continuous basis because QAS has proven to be a dedicated airport operations manager thus eliminating the need for the annual extension process. There is an existing contract provision that would allow for contract termination by the City should the contractor neglect or fail to comply with the conditions and covenants of the agreement, and that will remain in place. The direct monetary compensation portion of the contract would not be changed.

In addition to the contract extension language, the contract would be updated with some other minor clarifications such as address changes and other airport services clarifications.

Acceptance of the attached resolution would approve the contract update and allow other minor clarifications as needed with approval of the City Attorney and Airport Manager.

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BY COUNCILMAN

WHEREAS, Quality Aviation Services (QAS) was selected as the operations contractor for Jack Barstow Airport in 2006 with an initial term of two years with annual extensions; and

WHEREAS, QAS is performing at or above expected performance levels; and

WHEREAS, the City of Midland desires to update and modify the existing contract to make the contract continuous and implement other minor updates that do not change direct monetary compensation; now therefore

RESOLVED, that City Council authorizes the Mayor and City Clerk to sign and execute the updated contract language with Quality Aviation Services once approved by the City Attorney.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

Backup material for agenda item:

10. * Design Services for Upper Emerson Riverfront Renovation. MURPHY

SUMMARY REPORT TO MANAGER

For City Council Meeting of March 27, 2017

SUBJECT: Approve purchase orders to PM Blough, Inc. for design work and project oversight for the upper Emerson Park riverfront renovation project

INITIATED BY: Department of Public Services

RESOLUTION SUMMARY: This resolution approves two purchase orders to PM Blough, Inc. not to exceed $69,387 in total for design work and project oversight on the upper Emerson Park riverfront renovation project.

ITEMS ATTACHED:

1. Letter of Transmittal
2. PM Blough, Inc. proposal
3. Resolution

CITY COUNCIL ACTION:

1. 3/5 vote required to approve resolution

_____

Karen Murphy
Director of Public Services

Parks & Recreation ♦ 4811 North Saginaw Road ♦ Midland, Michigan 48640-2321 ♦ 989.837.6930 ♦ 989.835.5651 -Fax ♦ www.cityofmidlandmi.gov

March 22, 2017

Jon Lynch
City Manager
Midland, MI

RE: Approve purchase orders to PM Blough, Inc. for design work and project oversight for the upper Emerson Park riverfront renovation project

In order to move forward with the renovations to the riverfront in upper Emerson Park, Parks staff have requested a proposal from landscape architect Pam Blough of PM Blough, Inc. for the design work and project oversight. Ms. Blough assisted the City with the original conceptual plan and the grant application to the Michigan Natural Resources Trust Fund (MNRTF), and therefore is a natural fit to continue with the project. Parks staff have contracted with PM Blough, Inc. on other parks projects and have been well pleased with the services provided. Ms. Blough is very detail oriented and fiscally responsible, ensuring the City gets the results specified out in the field while making sure costs are fair and contained.

The entire renovation for upper Emerson riverfront is a two-phased project that involves the following:

1. Repurposing the old water intake pump house into a river viewing platform with interpretive signage explaining the original purpose of the pump house as it related to the City's drinking water supply and the importance of river water quality.
2. Removal of a portion of the existing Emerson Park roadway with the addition of a defined parking area, including an accessible path from the parking area to the river platform.
3. Addition of an accessible fishing dock and a section of boardwalk along the river bank that would include a floating dock for boaters to access the site.
4. Replacement of the existing old hand rail system along the seawall with the addition of seating areas and picnic tables.
5. Two pathways to connect the site to the Pere Marquette Rail Trail on either end of the project.

The City has secured funding via the Michigan Natural Resources Trust Fund and associated local matches to complete items 1-3 of the project at this time. With the project involving one contiguous section of riverfront and staff is working to secure the remaining funds needed to complete items 4-5, it is more cost effective to develop all the detailed design work at one time. There are adequate funds in the MNRTF project to cover the design work and project oversight for items 1-3, and there are funds set aside in the Parks operating budget under planning services to pay for the additional design work needed for items 4-5.

PM Blough, Inc. has submitted a comprehensive proposal for design work and project oversight for the entire project, broken out into the two phases. In order to satisfy the recordkeeping requirements of the MNRTF grant, we are asking City Council to authorize two separate purchase orders, with phase I not to exceed $52,800 and phase II not to exceed $16,587 per Ms. Blough's proposal. Staff will invoice work to the respective purchase orders as it is completed utilizing the appropriate funding sources for phase I and II, either the MNRTF project fund or the Parks operating budget for planning services. Keeping the two phases administratively separate on the City's end will make for easier reimbursement from the MNRTF grant on the back end of the project as well.

Respectfully Submitted,

Karen Murphy	Tiffany Jurgess
Director of Public Services	Interim Assistant Controller

PMB
PM Blough, Inc.

February 17, 2017 *(rev. 3/22/17)*

Ms. Karen Murphy
Public Services Director
Municipal Service Center
4811 N. Saginaw Rd.
Midland, MI 48640

RE: Proposal for Emerson Park Redevelopment Construction Documents

Dear Ms. Murphy,

It was extremely exciting news to hear of the successful award of the MNRTF grant to the City of Midland for Emerson Park. We know it is a much-deserved project within the City of Midland for an area of the Tittabawassee Riverfront experiencing revitalization. Based on our meeting, we also understand the desire to include, not only the area included in Phase I of the grant, but also the additional areas of the master plan which include to the other side of the creek bridge. We feel exceptionally fortunate to continue to be a part of its revitalization. This proposal includes services for the Topographic Survey, Design Development, Construction Documents, Permitting, Bidding, Grant Administration, and Construction Administration Services for the project.

We understand that the City and community is excited and ready to see these improvements constructed. Based on that and the discussions in our meeting, we have prepared a schedule which will provide for construction to begin in late summer 2017. This time schedule will require an aggressive design schedule beginning immediately, with permitting and bidding late spring through early summer, with the ground breaking hopefully by late July.

Summary of Project Budget based on the Master Plan

Phase I-MNRTF Grant Portion	
Construction Budget	$351,200.00
Permit Fees & Funding Sign	$ 1,000.00
Design & Construction Administration (15%)	$ 52,800.00
Total for MNRTF Grant Project	$405,000.00
Phase II-Additional City Portion of Funding (From Conceptual Cost Estimate 2014)	
Construction Budget	$242,677.00
Design Fees	$ 16,587.00
Total for Phase II Project	$259,264.00
TOTAL PROJECT BUDGET	**$664,264.00**

Summary of Project Elements

In summary, based on the MNRTF grant for Phase I, the project development elements for the grant portion will include the pump house overlook, parking lot, connection to the Pere Marquette, boardwalk, fishing deck, floating dock, landscape improvements, and picnic area as shown in the concept drawings with the grant application. Phase II will include the redevelopment of the area around the bridge area with a connection to the Pere Marquette, new railings, pathway, and removals as shown in the concept drawings. (The bridge removal will be a separate City project and is not currently included in this fee or project).

PMB
PM Blough, Inc.

Project Team

For this phase of the project, we have added to our team of design professionals, Rosenbrock Land Surveying, Inc who will provide a linear topographic Survey of approximately 1,900 lineal feet between the riverfront and the Pere Marquette Rail Trail which includes roughly the area from the Pump House to the end of the cul-de-sac. Rosenbrock Land Surveying, Inc. recently provided the topographic survey for the Chippewassee Park project. We had also received a quote from Apex which was substantially higher than the quote from Rosenbrock Land Surveying.

Also on our team will be Great Lakes Engineering Group, LLC with the specialized expertise of Casey Collings, PE a structural engineer who we are glad will be a part of the design effort. Casey recently provided expertise on the Currie Bridge walkway project as well as the overall renovation of the bridge. He is a creative and skillful structural engineer for unique projects. He will be assisting us with assessing the foundations of the Pump House, design of a structural slab within the Pump House for the overlook floor, and work with us on the structural calculations for the boardwalk.

The last part of the team that we have not yet secured, will be someone to assist us with the building masonry partial disassembly and repair, capping of the walls, and the structural beams or trusses. We envision this person will be an architect, a specialized structural engineer, or a licensed builder experienced in masonry. We have not yet found this unique person, but will submit them for City approval prior to the design work commencing. We have included an allowance for these services, however.

We have also included in our fee an allowance for soil borings for the project. We think that we should have soil borings for the fishing deck, boardwalk, and parking lot locations. We can contract with McDowell who provided borings for the Chippewassee Project on the City PO or any other vendor that the City prefers.

Work Scope

The following Work Scope is proposed in completing the project:

Design Development

1. Coordinate the topographic survey. The topographic survey will include the existing features and topography in the project area. The survey will include the pump house building foundations and floor elevations, the existing roadway edges, the existing Pere Marquette Trail edges, the riverbank from the pump house to the floating dock including 6" or larger trees, the remaining riverbank to the creek, the existing sidewalk, topography, and any other existing features. Develop base drawing sheets for design.

2. Overlay the existing site master plan to the topographic survey. Refine the proposed design to develop a Design Development drawing which is based on the proposed features and the existing topographic contours and natural features on the site.

3. Meet on-site with the City staff and design team to walk the site and review the existing conditions comparing the proposed Design Development Plan to the actual site conditions. Discuss any needed revisions. Discuss proposed best locations for elements such as the overlook, parking, boardwalk, dock, pathways, connections to the Pere Marquette Rail Trail,

new fishing areas by the creek, etc. At the same meeting review the pump house foundations and structure. Note the current conditions. Discuss possible solutions, etc.

4. Refine the Design Development layout plan based on the meeting. Prepare preliminary site grading and stormwater thoughts and solutions. Prepare preliminary drawings for the pump house overlook. Prepare preliminary fishing deck and boardwalk layout drawings.

5. Conduct research regarding the pump house masonry and overhead structure.

6. Research and submit for review and approval of material and product selections for the overlook construction, benches and site furnishings, railings, floating dock, and any other elements.

7. Prepare a conceptual project estimate to evaluate the design to the proposed project estimate.

8. Meet with the City to review the Final Design Development Drawing, Material Selections, and other appropriate research.

Construction Documents

1. Finalize the Design Development materials into Construction Documents including drawings, specifications, and the bid manual.

2. Complete a 75% Construction Document Drawing set for review with the City.. Finalize the design of all elements including site design, details, grading, stormwater, pump house overlook, boardwalk and appropriate drawing notes. The Construction Documents will include all the project elements listed above as included in Phase I and Phase II.

3. Update the project conceptual cost estimate.

4. Meet with the City to review the Construction Document drawings, preliminary specifications, and conceptual cost estimates.

5. Coordinate with the City of Midland Purchasing Department to incorporate the City of Midland's Standard Purchasing Documents into the front end of the Bid Manual.

6. Based on feedback received from the City, revise and finalize the Construction Documents into a 95% set of Construction Drawings and Bid Manual for final review by the City.

7. Provide 95% Complete Final Review Construction Documents to the City for Final Review and Comment. Incorporate all comments into the Final 100% Complete Documents.

Grant Administration

1. Prepare the drawings and bid manuals within the requirements of the MNRTF grant requirements as provided by the MDNR.

2. Provide final 100% Sealed Construction Document Drawings, Bid Manual, Cost Estimates, and Schedule for Submittal to the MDNR grant staff for review and approval to bid. Prepare Required MDNR Plan Submittal and Professional Services Forms for Submittal to the MDNR.

3. Provide Notice of Contract Award to the MDNR.

4. Assist City in preparing and signing the required MDNR Reimbursement Requests for financial reimbursement from the MDNR.

5. Assist the City in final grant closeout Certification Checklist.

Permitting

1. Prepare the MDEQ Joint Floodplain Permit Application for work within the floodplain of the Tittabawassee River. City to sign and provide the required submittal fee. PMB to provide the required drawings. (This permit assumes that no additional hydraulic modeling or wetlands staking will be required due to the park features being constructed. Should this be required, it will be submitted as an additional fee to the City). Answer any questions of the MDEQ and follow the permitting process through completion.

2. Prepare the drawings to include Soil Erosion and Sedimentation Control Measures. The Construction Contractor will be responsible for submitting for the permit.

Bidding and Construction Administration

1. Assist Purchasing with the Bidding of the project including answering of bidder questions, preparation of any required addenda, and review of the bids. Prepare a memo of recommendation for the selection of the bidder.

2. Assist the City with the contract signing process including securing of insurance certificates, bonds, and contractor signatures.

3. Schedule and facilitate the Pre-Construction meeting for the project. Prepare and distribute the agenda and the meeting summary to all participants and appropriate agencies.

4. Receive shop drawings and submittals from the Contractor. Prepare a schedule of submittals and track all submittals. Review, distribute, comment and approve submittals as appropriate.

5. Schedule, prepare agendas, attend, and prepare meeting summaries for four on-site project meetings with the Contractor, City staff, and appropriate attendees. At the meetings review the on-site progress, answer contractor questions, review submittals, and address appropriate issues.

6. Throughout the construction process, answer contractor questions and coordinate with the City. City will provide staff for specific on-site construction observation and secure needed testing such as materials and density testing, collecting of material tickets, on-site during paving, etc.

7. Prepare any required Change Orders or field orders for items that arise as part of unforeseen conditions within the project.

PMB
PM Blough, Inc.

8. Review Contractors Application for Payment and make recommendations to the City regarding payment of the applications.

9. Review work completed for acceptance and payment by City.

10. Prepare a final punch list of items once the project is Substantially Complete. Follow up with Contractor on punch list items until they are complete. (2 site visit included)

11. Complete the final project close out for the project including collecting final waivers of lien from the contractor.

Proposed Schedule

Below is a proposed schedule for the project. The schedule is based on the design of the project beginning immediately to allow for the required review and approvals by the MDNR grant staff, as well as the required permitting by the MDEQ. The proposed schedule will focus the construction of the project during the summer of 2017 with a formal Ribbon Cutting probably late fall or spring of 2018. This schedule will fall within the grant timeline which allows 24 months for the completion of the project. This schedule can be modified to best meet the needs and requirements of the City of Midland.

	2017										2018					
Tasks	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Fed	Mar	Apr	May	Jun
Topographic Survey																
Design Devolpment																
Soil Borings																
Construction Documents																
MDNR Approval																
Permitting																
Bidding & Contracts																
Ground Breaking																
Project Construction																
Ribbon Cutting																

Proposed Fee

For this Work Scope, the following fee is proposed:

Topographic Survey	$ 4,380.00
Design Development	$12,440.00
Construction Documents	$27,269.00
Grant Administration	$ 1,710.00
Permitting	$ 3,510.00
Soil Borings Allowance	$ 2,500.00
Bidding	$ 2,280.00
Construction Administration (Phase I)	$15,105.00
Totals	$69,194.00

PM Blough, Inc.

The MNRTF has $52,800 in grant funds for design and construction administration for Phase I. The additional to include the design services of Phase II at the same time within the project cost would be $16,587.00.

As in all our work with the City of Midland, this fee will be invoiced monthly based on the services provided during the previous month. This fee includes all time, materials, and expenses. Any fee not utilized over the course of the project will not be invoiced to the City.

We appreciate this opportunity to further serve the City of Midland. Please feel free to contact us with any questions that you might have in order that we can modify this proposal to best serve your intentions.

Sincerely,

PM Blough, Inc.

Pamela Blough

Pamela Blough, PLA, FASLA
President & Principal Landscape Architect

Parks & Recreation ♦ 4811 North Saginaw Road ♦ Midland, Michigan 48640-2321 ♦ 989.837.6930 ♦ 989.835.5651 -Fax ♦ www.cityofmidlandmi.gov

BY COUNCILMAN

WHEREAS, in order to move forward with renovations to the riverfront in upper Emerson Park it is necessary to secure design and oversight services for the project; and

WHEREAS, Section 2-19 of the Code of Ordinances states that sealed proposals are not required for contracts for professional services; and

WHEREAS, staff worked with landscape design architect PM Blough, Inc. on the initial conceptual plans for the project as well as the grant application for the Michigan Natural Resources Trust Fund (MNRTF) which will fund a majority of the project; and

WHEREAS, PM Blough, Inc. has provided design and project oversight on other Park projects in recent years yielding excellent results for the City; and

WHEREAS, the upper Emerson Park project consists of two phases of which the City has currently secured funding to complete phase I of the project with additional funds available in the current fiscal year Parks operating budget for design services for phase II; and

WHEREAS, Parks staff are working to secure funding for the second phase of the project to be completed at a later date; and

WHEREAS, it is more cost effective to purchase design services for both phases of the project at one time and therefore, PM Blough, Inc. has provided a proposal for design services and project oversight for both phases I and II of the project; and

WHEREAS, the two phases of the project need to be accounted for separately in order to comply with MNRTF grant guidelines and therefore, two purchase orders need to be utilized to keep phase I and phase II costs clearly separated; now therefore

RESOLVED, that City Council authorizes two purchase orders to PM Blough, Inc. - one not to exceed $52,800 for phase I design and project oversight services, and the second not to exceed $16,587 for phase II design services for the upper Emerson Park riverfront renovation project.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

T: Emerson MNRTF design services – PM Blough 3-27-17

Backup material for agenda item:

11. * Renovations to the exterior planters at the Grace A. Dow Memorial Library. BARNARD

SUMMARY REPORT
for City Council meeting of March 27, 2017

SUBJECT: Authorize a purchase order to Three Rivers Corporation for renovations to the planters at the library

INITIATED BY: Melissa Barnard, Library Director

RESOLUTION SUMMARY: This resolution authorizes a purchase order in the amount of $25,700 to Three Rivers Corporation to provide renovations to the exterior planters at the Grace A. Dow Memorial Library and further provides the Assistant/Interim City Manager authorization to approve change orders not to exceed $2,000 in total.

ITEMS ATTACHED:

1. Letter of Transmittal
2. Resolution

CITY COUNCIL ACTION:

3/5 vote required to approve resolution

Melissa Barnard
Library Director

CITY OF
Midland

Grace A. Dow Memorial Library • 1710 West Saint Andrews Road • Midland, MI 48640-2698
989.837.3430 • 989.837.3468 Fax • www.cityofmidlandmi.gov/library

March 22, 2017

TO: David Keenan, Assistant/Interim City Manager

SUBJECT: Authorize a Purchase Order for Planter Renovations

In 2013, the Grace A. Dow Memorial Library received an unrestricted gift of $25,000. The funds have been set aside to renovate the planting areas by the front of the library entrance. A design has been developed that will remove the concrete edging around the three planters and replace the area with benches, grass, bushes and pavers. The library budget has funds to cover the costs above the $25,000 gift.

On Tuesday, February 21, 2017 at 2:00 p.m. sealed proposals for Bid #3848, Grace A. Dow Memorial Library Planter Renovations, were publicly opened by the Interim Assistant Controller. Bids were received as follows:

Oak Construction Corporation, Flushing MI	$19,900.00
Three Rivers Corporation, Midland MI	$25,700.00
Great Lakes Bay Construction, Midland, MI	$26,750.00
Sugar Construction, Midland, MI	$32,700.00
Serenus Johnson, Bay City, MI	$46,600.00

Staff is recommending that the lowest bid submitted by Oak Construction Corporation not be accepted. Based on an interview with a company representative and references, Oak Construction Corporation has not done a landscaping project similar to this project. The references provided were for concrete and paving jobs including parking lots, catch basins, concrete grading and bike paths. Preparing the bedding and placing the pavers, and installing the sprinkler system would be outside their experience. They also were not familiar with the decking material. No subcontractors would be used for this project.

In an interview with representatives from Three Rivers Corporation, they explained that the grounds work will be subcontracted with a landscaping company. Three Rivers Corporation construction staff have worked with the decking material and have the necessary equipment to properly cut the boards.

It is recommended that the bid submitted by Three Rivers Corporation be accepted and the Interim Assistant Controller be authorized to issue a purchase order in the amount of $25,700 and further authorize the Assistant/Interim City Manager to approve change orders not to exceed $2,000 in total. Funds are available in the 2016-2017 budget of the Grace A. Dow Memorial Library.

Respectfully Submitted:

Melissa Barnard

Melissa Barnard, Library Director

_____

Tiffany Jurgess, Interim Assistant Controller

CITY OF
Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax • www.midland-mi.org

BY COUNCILMAN

WHEREAS, sealed proposals have been advertised and received in accord with Article II of Chapter 2 of the Midland Code of Ordinances for the planter renovations at the Grace A. Dow Memorial Library; and

WHEREAS, funds for this project are available in the 2016-2017 Grace A. Dow Memorial Library; now therefore

RESOLVED, that the proposal submitted by Three Rivers Corporation for planter renovations at the Grace A. Dow Memorial Library in the amount of $25,700 is hereby accepted and the Interim Assistant Controller authorized to issue a purchase order; and

RESOLVED FURTHER, that the Assistant/Interim City Manager is authorized to approve change orders not to exceed $2,000 in total.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all of the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

Backup material for agenda item:

12. * 2017 Pavement Marking Program; Contract No. 18. MCMANUS

SUMMARY REPORT TO THE CITY MANAGER
for Council Meeting of March 27, 2017

SUBJECT: 2017 PAVEMENT MARKING PROGRAM; CONTRACT NO. 18

INITIATED BY: City of Midland Engineering Department

RESOLUTION SUMMARY: This resolution authorizes the Mayor and City Clerk to execute a contract with P.K. Contracting for the annual pavement marking of major streets in the amount of $45,250.00.

ITEMS ATTACHED:
1. Cover Letter
2. Resolution

CITY COUNCIL ACTION: 3/5 vote required to approve resolution

SUBMITTED BY: Brian McManus, City Engineer

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JJM

CITY OF Midland

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

March 22, 2017

Jon Lynch
City Manager
City of Midland, Michigan

Dear Mr. Lynch:

On Tuesday, March 21, 2017 at 2:00 p.m., sealed proposals were publicly opened and read by the Interim Assistant Controller for the "2017 Pavement Marking Program; Contract No. 18".

Bid solicitations were sent to companies that perform this type of work, and advertisements were issued by the Interim Assistant Controller.

Two bids were received as follows:

P.K. Contracting, Lake City, MI	$ 45,250.00
Michigan Pavement Marking, Grand Blanc, MI	$ 58,675.00
*Engineers Estimate	$ 59,000.00

Funding for this project is provided by the Major Street Fund. This contract is for the annual pavement marking of centerline and edge striping for approximately 82 centerline miles of major streets within the city of Midland.

It is our recommendation that the bid of $45,250.00 submitted by P.K. Contracting be accepted in the best interest of the City of Midland.

Respectfully submitted,

_____ _____

Brian McManus, City Engineer Tiffany Jurgess, Interim Assistant Controller

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JJM

City Hall • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • 989.837.3300 • 989.835.2717 Fax

BY COUNCILMAN

WHEREAS, sealed proposals have been advertised and received in accord with Article II of Chapter 2 of the Midland Code of Ordinances for the annual pavement marking of major streets; and

WHEREAS, sufficient funding for this project is provided by the Major Street Fund; now therefore

RESOLVED, that the sealed proposal submitted by P.K. Contracting, for the "2017 Pavement Marking Program; Contract No. 18", in the indicated amount of $45,250.00, based upon City estimated quantities is hereby accepted and the Mayor and the City Clerk are authorized to execute a contract therefore in accord with the proposal and the City's specifications; and

RESOLVED FURTHER, that the City Manager has the authority to approve change orders modifying this contract in an aggregate amount not to exceed $10,000.00.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

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JJM

Backup material for agenda item:

13. * Sewer Linings, Main Street and Meadowbrook Drive - Wastewater. SOVA

SUMMARY REPORT TO MANAGER
For City Council Meeting of March 27, 2017

SUBJECT: WASTEWATER – SEWER LININGS ON MAIN ST. FROM GORDON ST. TO CRONKRIGHT ST., AND TWO STRETCHES ON W. MEADOWBROOK DR., BID NO. 3854

INITIATED BY: Joseph Sova, Utilities Director

RESOLUTION SUMMARY: This resolution accepts the low bid units submitted by Corby Energy Services of Belleville, Michigan, and authorizes a purchase order in the amount of $114,850.00 for trenchless sanitary sewer lining repair of approximately 1,885 feet on Main St., and 600 feet on W. Meadowbrook Dr., in accord with Sec. 2-18 of the Code of Ordinances for the City of Midland, and staff further recommends that the City Manager be authorized to make changes to the purchase order in an aggregate amount not to exceed $20,000.00.

ITEMS ATTACHED:

1. Letter of transmittal
2. Location Maps – Main St. and W. Meadowbrook Dr.
3. Resolution

COUNCIL ACTION:

1. 3/5 vote required to approve resolution.

NDB:jjs

CITY OF Midland

Utilities Department • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • (989) 837-3341 • CitizenCommentsWater@midland-mi.org

March 22, 2017

Jon Lynch, City Manager
City of Midland

SUBJECT: WASTEWATER – SEWER LININGS, MAIN ST. FROM GORDON ST. TO CRONKRIGHT ST. AND TWO STRETCHES ON W. MEADOWBROOK DR. BID NO. 3854

Dear Mr. Lynch:

Wastewater staff proactively inspects concrete sanitary sewer lines to find any defects or infiltration, and prioritizes the repair or rehabilitation needs of the sanitary system. Inspections, in part, are driven by the Engineering Priorities of the City, where streets are planned to be reconstructed. Staff inspects ahead of the street construction activities and identifies areas of greatest need, and budget for repair or rehabilitation.

The method of choice is to rehabilitate existing pipe where feasible, rather than excavate and replace faulty pipe. Cured-in-place pipe (CIPP) is continuous and tight-fitting inside the existing pipe and improves the flow coefficient of the pipe, while extending the life of the sewer of up to an additional 50 years. In addition, CIPP is less intrusive, less expensive, and can improve the overall pipe functionality.

These areas of sanitary pipe have been identified as needing to be rehabilitated:

1) 1,225 feet of 18-inch diameter pipe on Main St. from Gordon St. to Townsend St.
2) 350 feet of 12-inch diameter pipe on Main St. from Townsend St. to Cronkright St.
3) 310 feet of 10-inch diameter pipe on Main St. from Cronkright St. to the east under Poseyville Bridge
4) 600 feet of 10-inch diameter pipe on W. Meadowbrook Dr. between Saginaw Rd. and Crescent Dr.

The sanitary sewer pipe on Main St., with a total length of 1,885 (1,225 + 350 + 310) feet was installed in the 1930s and has cracks and pipe offsets. There are also approximately 70 lateral connections along Main St. After video inspection and dye testing, it was found that only 15 of the lateral connections are in use. By lining over the remaining lateral connections, infiltration and undermining of the road will be eliminated.

Street reconstruction of W. Meadowbrook Dr. is scheduled to begin this spring. There are two stretches of sanitary sewer pipe under W. Meadowbrook Dr. that are in need of rehabilitation due to cracks and infiltration, and will be lined prior to the start of the street reconstruction.

On March 14, 2017, bids were received for Bid No. 3854, Sewer Lining. The lump sum prices for lining the sanitary sewer pipe were established based on the diameter and length of the pipe. Bids received were as follows:

Bidder	Lump Cost
Corby Energy Services, Belleville, MI	**$114,850.00**
Insituform Technologies, Chesterfield, MO	$131,845.00
Lanzo Trenchless Tech, Roseville, MI	$137,550.00
Inland Waters, Detroit	$138,975.00

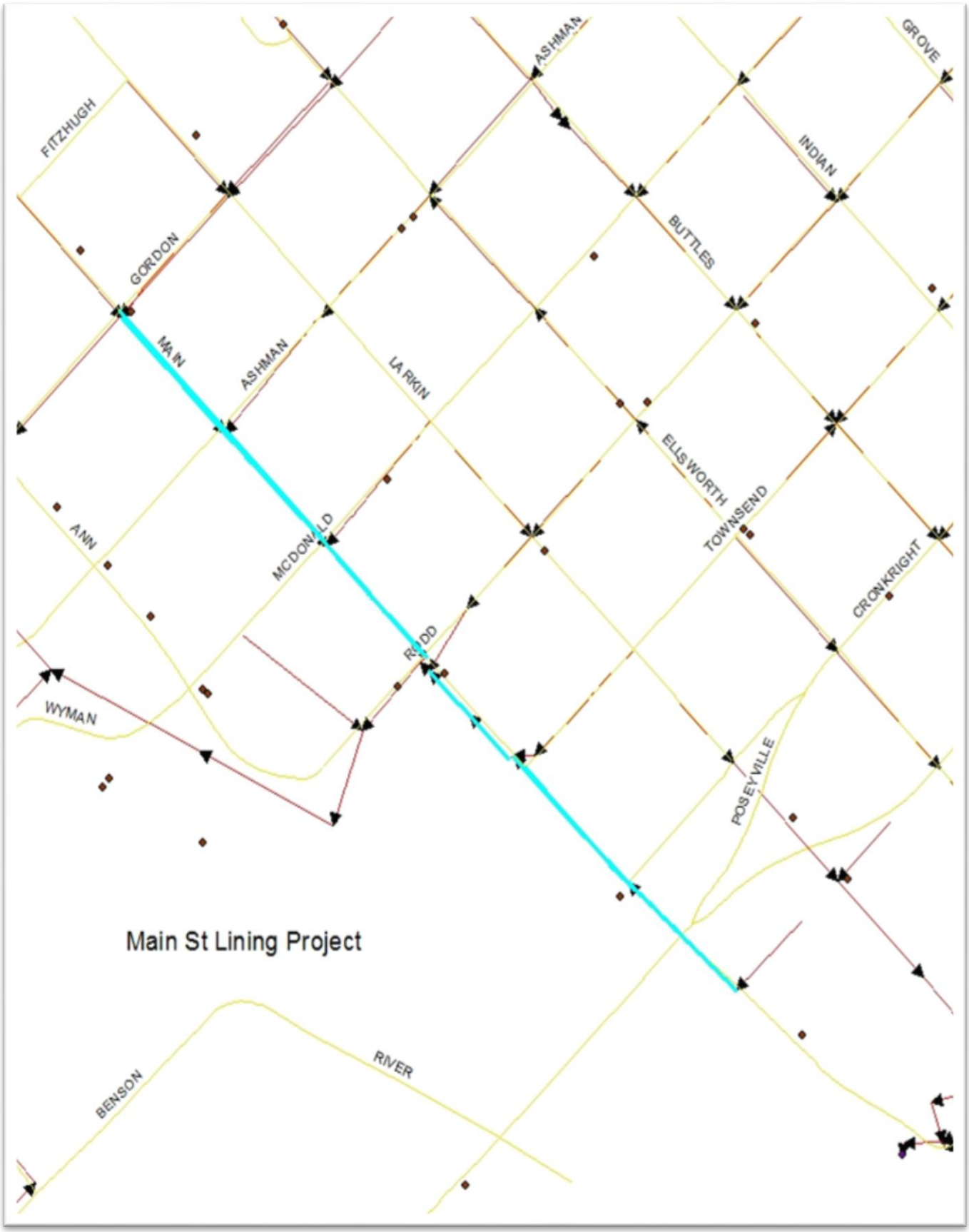
The low bid price was submitted by Corby Energy Services, Belleville, Michigan in the amount of $114,850.00.

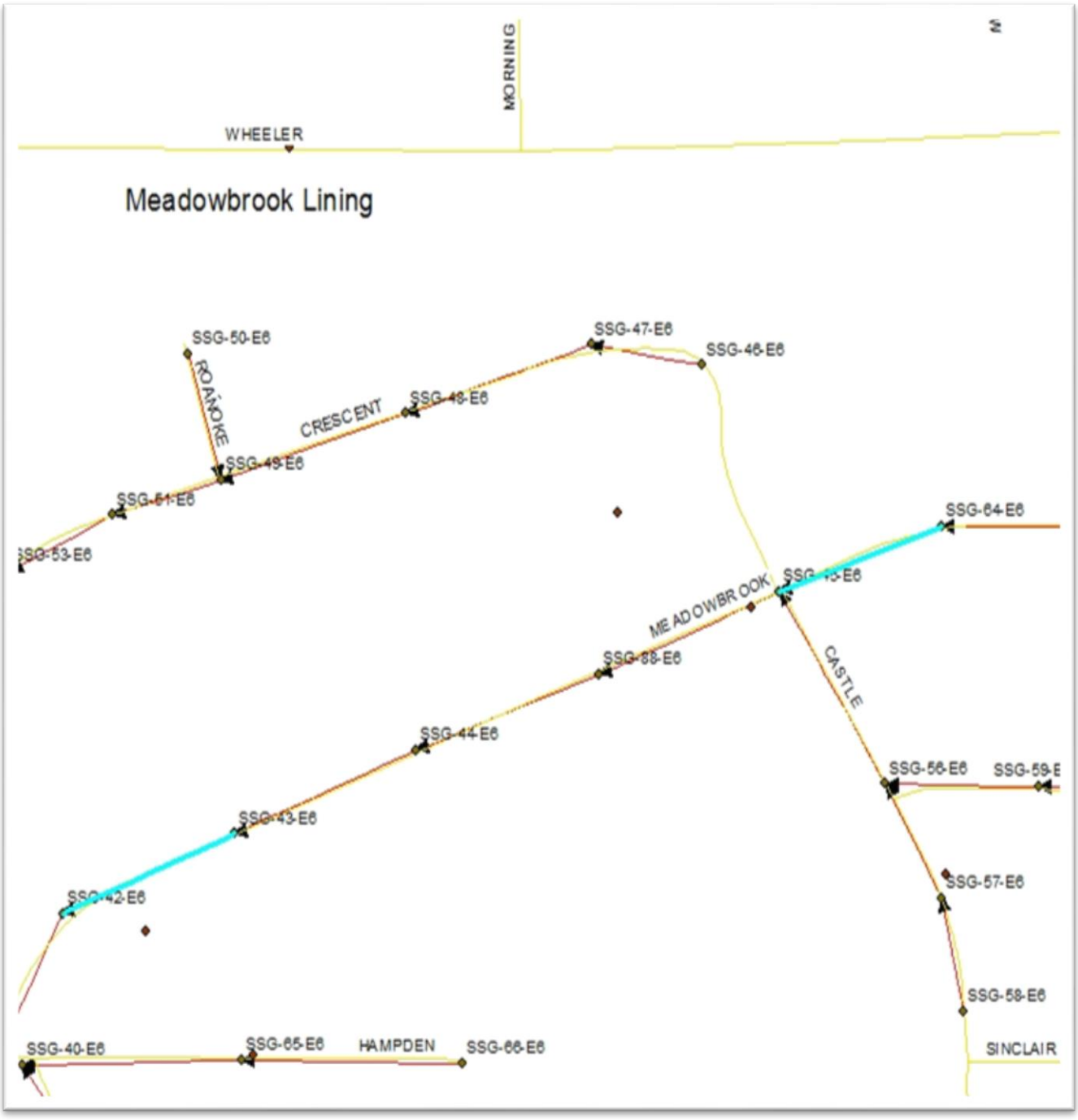
Sufficient funding for the sewer lining repairs has been budgeted in Wastewater Enterprise Fund account 590.9120.97.050 - Capital Outlay Sewer System. Staff therefore, recommends that a purchase order be authorized to Corby Energy Services in the amount of $114,850.00. Staff further recommends that the City Manager be authorized to make changes to the purchase order in an aggregate amount not to exceed $20,000.00. A 3/5 vote is required to approve the resolution.

Respectfully submitted,

Joseph Sova, Utilities Director

Tiffany Jurgess, Interim Assistant Controller


FITZHUGH
GORDON
MAIN
ASHMAN
LARKIN
MCDONALD
ANN
WYMAN
RUDD
ASHMAN
BUTTLES
INDIAN
GROVE
ELLSWORTH
TOWNSEND
CRONKRIGHT
POSEYVILLE
Main St Lining Project
BENSON
RIVER


MORNING
WHEELER
Meadowbrook Lining
SSG-50-E6
ROANOKE
CRESCENT
SSG-48-E6
SSG-47-E6
SSG-46-E6
SSG-49-E6
SSG-51-E6
SSG-53-E6
SSG-64-E6
MEADOWBROOK
SSG-88-E6
CASTLE
SSG-44-E6
SSG-56-E6
SSG-59-E
SSG-43-E6
SSG-57-E6
SSG-58-E6
SSG-40-E6
SSG-65-E6
HAMPDEN
SSG-66-E6
SINCLAIR

CITY OF Midland

Utilities Department • 333 West Ellsworth Street • Midland, Michigan 48640-5132 • (989) 837-3341 • CitizenCommentsWater@midland-mi.org

BY COUNCILMAN

WHEREAS, Wastewater staff proactively inspects concrete sanitary sewer lines to find any defects or infiltration, and prioritizes the repair or rehabilitation needs of the sanitary system; and

WHEREAS, approximately 1,885 feet on Main St., and 600 feet on W. Meadowbrook Dr. have been identified as needing to be rehabilitated; and

WHEREAS, on March 14, 2017, bids were received for Bid No. 3854, Sewer Lining, in accord with section 2-18 of the Midland Code of Ordinance; and

WHEREAS, the low bid unit prices of $114,850.00 for the pipe lining services were received from Corby Energy Services, Belleville, Michigan; and

WHEREAS, sufficient funding for the sewer lining repairs has been budgeted in Wastewater Enterprise Fund account 590.9120.97.050 - Capital Outlay Sewer System; now therefore

RESOLVED, that the bid value of $114,850.00, based on the low bid prices, is hereby accepted, and authorization is granted for the issuance of a purchase order in that amount to Corby Energy Services; and

RESOLVED FURTHER, that the City Manager is authorized to approve changes to the purchase order in an aggregate amount not to exceed $20,000.00.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

Backup material for agenda item:

14. * E10 Ethanol Blend Unleaded Fuel purchase from March 9 (4/5 vote required). MURPHY

SUMMARY REPORT TO MANAGER

For City Council Meeting of March 27, 2017

SUBJECT: Approve Fuel Purchase from March 9, 2017

RESOLUTION SUMMARY: This resolution waives the requirement for sealed proposals and approves the purchase of 13,400 gallons of E10 ethanol blend unleaded fuel from Tri-Lakes Petroleum for $20,863.80 that was executed by the Interim Assistant Controller on March 9, 2017.

ITEMS ATTACHED:

1. Transmittal letter to City Manager

2. Resolution

CITY COUNCIL ACTION:

1. 4/5 vote required to approve resolution

_____

Karen Murphy
Director of Public Services

MMR

CITY OF
Midland

Department of Public Services ♦ 4811 North Saginaw Road ♦ Midland, Michigan 48640 ♦ 989.837.6900 ♦ 989.835.5651 Fax ♦ www.cityofmidlandmi.gov

March 20, 2017

Jon Lynch
City Manager
Midland, Michigan

RE: Approve fuel purchase made on March 9, 2017

At their December 17, 2007 meeting, City Council adopted a resolution that allows for the purchase of full tankers of unleaded gasoline and diesel fuel exceeding $20,000, and seek approval for the purchase at the next available Council meeting. Fuel is ordered on an as needed basis to maintain an adequate supply to meet the demand of the city fleet as well as to keep a reserve on hand to cover any unanticipated increase in usage. This process was reviewed by City Council on December 21, 2009 and is still deemed to provide significant cost savings to the City.

Fuel is purchased through a competitive bid process whereby the Interim Assistant Controller faxes out a request for a price per gallon for unleaded and/or diesel fuel to a list of fuel suppliers. Interested suppliers fax back their prices the following morning. Due to the volatility of the fuel market, pricing is only valid for the remainder of that day. The fuel purchase is awarded to the lowest price supplier, and the fuel delivery is scheduled for that same day.

It should be noted that approval of fuel purchases will require a 4/5 vote due to the need to waive the requirement for sealed proposals as a result of the above-described bidding process.

Bids were received using this process on March 9, 2017 for 13,400 gallons of E10 ethanol blend unleaded fuel. Bids were received as follows:

Tri-Lakes Petroleum, Alma, MI	E10 Ethanol Blend Unleaded Fuel	$1.5570/gallon
Hirschman Oil, Reese, MI	E10 Ethanol Blend Unleaded Fuel	$1.5700/gallon
Paxson Oil, Saginaw, MI	E10 Ethanol Blend Unleaded Fuel	$1.5744/gallon
Duncan Oil, Beaver Creek, OH	E10 Ethanol Blend Unleaded Fuel	$1.5822/gallon
Super Flite Oil, Saginaw, MI	E10 Ethanol Blend Unleaded Fuel	$1.5840/gallon
Michigan Petroleum, Port Huron, MI	E10 Ethanol Blend Unleaded Fuel	$1.6400/gallon
Foster Blue, Richmond, MI	E10 Ethanol Blend Unleaded Fuel	$1.6413/gallon

The low bid was received from Tri-Lakes Petroleum of Alma, Michigan, with a price of $1.557 per gallon. The unit price includes the delivery charge, and the total purchase price was $20,863.80 for 13,400 gallons of fuel delivered.

We are requesting that Council waive the requirements for sealed bids, and approve the purchase of 13,400 gallons of E10 ethanol blend unleaded fuel from Tri-Lakes Petroleum for $20,863.80 that was executed by the Interim Assistant Controller on March 9, 2017.

Respectfully submitted,

Karen Murphy
Director of Public Services

Tiffany Jurgess
Interim Assistant Controller

Department of Public Services ♦ 4811 North Saginaw Road ♦ Midland, Michigan 48640 ♦ 989.837.6900 ♦ 989.835.5651 Fax ♦ www.cityofmidlandmi.gov

BY COUNCILMAN

WHEREAS, City Council adopted a resolution on December 17, 2007 that allows for the purchase of full tankers of unleaded gasoline and diesel fuel exceeding $20,000, and seek approval for the purchase at the next City Council meeting; and

WHEREAS, City Council reviewed the process on December 21, 2009 and decided to continue as it still provides a significant cost savings to the City; and

WHEREAS, the volatility of the fuel market does not allow for staff to follow the usual sealed bid process for purchases exceeding $20,000; and

WHEREAS, staff instead uses a competitive bid process whereby fuel vendors fax in prices that are valid for a particular day with the bid awarded to the lowest priced vendor; now therefore

RESOLVED, that the requirements for sealed proposals for the purchase of fuel are waived due to the volatility of the fuel market; and

RESOLVED FURTHER, that the purchase of 13,400 gallons of E10 ethanol blend unleaded fuel from Tri-Lakes Petroleum of Alma, Michigan for $20,863.80 executed by the Interim Assistant Controller on March 9, 2017, is hereby approved.

YEAS:

NAYS:

ABSENT:

I, Selina Tisdale, City Clerk, City of Midland, Counties of Bay and Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a yea vote of all the Councilmen present at a regular meeting of the City Council held Monday, March 27, 2017.

_____

Selina Tisdale, City Clerk

T: UL Fuel 03-09-17 for 03-27-17